

NORTHAMPTONSHIRE COUNTY COUNCIL



Annual Report

OF THE

MEDICAL OFFICER
OF HEALTH

FOR THE YEAR

1960



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NORTHAMPTONSHIRE COUNTY COUNCIL.

June, 1961.

To the Chairman and Members of the Northamptonshire County Council.

MR. CHAIRMAN, MY LORDS, LADIES AND GENTLEMEN,

I have the honour to present the Sixty-fourth Annual Report of the County Medical Officer of Health.

The vital statistics call for little comment. The estimated population of the County has risen to 292,690, the increase being largely accounted for by the continuous growth of Corby. The birth rate was 17.7 per thousand population, which is a little over the rate of England and Wales (17.1) and an increase on last year's rate (16.6). The death rate was 10.88 per thousand, compared with 10.77 last year. The infant mortality rate was 22.57, which is a slight increase on last year's rate of 20.22 and also slightly over the national rate (21.7). The infant mortality rate is steadily declining over the years and a slight increase in one year can be regarded as mainly due to chance fluctuations. A note on the rate will be found on page 8.

The main event of the year was the planning and extension of the services required under the Mental Health Act, the principal sections of which came into operation on November 1st. For adult and junior training centres and a hostel at Kettering, where an excellent site has been secured, detailed plans were prepared and have since been approved by the Ministry of Health. The work of the training centres has expanded and the Committee took the important decision to provide transport facilities for all the children who attend training centres. In accordance with the Development Plan, approved by the County Council, two additional mental health officers were appointed. Full details of the activities of the Department in the mental health field are described by Dr. Reid on pages 54 to 60 of the Report. The Minister of Health has recently announced his long-term plans for the mental hospital services, in which it is envisaged that the large mental hospitals in the country as we know them at present will, in time, disappear and the need for hospital beds will be halved. These objectives will be attained only if the Local Health Authorities are enabled to fulfil their programmes for comprehensive community care. Whether the number of beds will be reduced to the extent that is contemplated will also depend on the attitude of the public and on the social structure of society. In modern life there is an increasing trend for members of the family to find work away from the home town and when misfortune overtakes the parents there are now fewer relatives at hand to rally round in support. This social trend will, to some degree, increase the difficulties of caring for patients in the community. Mental illness is often due to a man or woman having to face circumstances beyond their breaking point. Long-term hospital care has been shown to be valueless in these patients, who can be restored to mental health only if under skilled guidance their day-to-day circumstances are so re-adjusted that they are once more able to cope with everyday life. The mental health officers will be able to render invaluable assistance to the consultant psychiatrists in the treatment of such cases.

The demand on the ambulance service continues to grow, and no less than 104,739 patients were transported. A note on the experience obtained in dealing with accidents on the M.1 motorway will be found in the Report. As would be expected, on account of the speed of the traffic, special precautions had to be taken to protect staff.

An important policy decision affecting the antenatal clinics was taken by the Committee. For over 20 years the County Council had provided antenatal clinics at which the attendances had steadily risen until 1952, after which there was a gradual decline resulting from the introduction of the National Health Service under which expectant mothers can receive maternity medical services from their own doctors. In 1960, the total attendances were 6,559.

In recent years, contrary to what might be expected, the largest proportion of women who attended the Authority's antenatal clinics were those booked for admission to hospital on social grounds. Mothers due to be confined at home received antenatal care from their own doctors.

The Local Authority antenatal clinics have been criticised on the score that the doctor in charge was not in active obstetrical service. Despite this, however, women members of the staff who conducted the clinics acquired a skill and experience in this particular branch of obstetrics and their services were appreciated by the mothers, many of whom preferred to be examined by a member of their own sex. At the clinics, special efforts were taken to give the mothers the elementary facts on pregnancy and to answer all their questions. There is no doubt that the work done at the Local Authority clinics must have made a substantial contribution to the reduction of maternal mortality and morbidity.

In 1956, a Local Maternity Services Co-ordinating Committee was formed to consider a memorandum on antenatal care and recommended, *inter alia*, that the County Council should discontinue the clinics in their present form. The Health Sub-Committee decided to defer a decision until the observations of other organisations had been received. Later, the Cranbrook Committee on Maternity Services issued their report in which they reserved the future of antenatal clinics for later consideration. In November, the Local Maternity Services Co-ordinating Committee sent a questionnaire to all doctors practising in the County, in which they asked whether they would be prepared to undertake the full antenatal care of patients booked for confinement at hospital or at home and to ensure that follow-up visits were made to patients failing to attend for antenatal examination. In a covering letter the doctors were informed :

"The Consultant Obstetricians and the County Council Health Department cannot be expected to delegate to General Practitioners the antenatal care of patients booked for hospital on social grounds or to terminate this supervision as at present carried out at antenatal clinics unless satisfied that this care by Practitioners will be as good as it is at present. They have therefore requested that an up-to-date assurance be obtained from those practitioners who are prepared to accept the responsibility of antenatal supervision."

The doctors were also informed that if they were prepared to undertake antenatal care it was presumed that this would be in accordance with recognised modern practice.

The questionnaire was sent to 157 Practitioners who were still in midwifery practice and of these all but three gave an affirmative reply. In view of this assurance the Health Committee decided to amend their policy regarding antenatal clinics which would cease to provide medical and obstetrical supervision and would become centres for mothercraft, health education and relaxation. The women doctors would no longer attend.

Increasing attention in the Department was devoted to health education. The County Council decided that one of the posts of assistant superintendent nursing officer should be regraded as health education officer. When this appointment is made the health education activities will be planned and directed so that all members of the staff will receive the necessary assistance in their work in clinics, schools, meetings of voluntary committees, mothers' clubs and so on. The expansion of the health education service is described in detail on pages 50 to 53.

Graphic descriptions of typical examples of problems encountered by the health visitors will be found on page 25. Undoubtedly the health visitors have to spend more time and attention on problems of child management and marital relations than on those related to physical conditions.

The work of the district nurses continues to be appreciated, especially by the old people, and their activities extend far beyond their professional duties. The district nursing service does not attract much public attention but one has only to speak to a group of general practitioners to realise the value of the home nurse's work.

Two events took place in the home help service. A course of instruction was held in Wellborough, where some forty-seven home helps attended for classes on home nursing, problem families, mentally disordered patients, helping maternity cases, diet and prevention of accidents. This course was greatly appreciated by the home helps. The Committee also decided that

badges should be given to home helps who had given regular part-time service for a year and, in addition, holidays with pay *pro rata* to the hours worked were granted.

Much of the medical, nursing and clerical staff is devoted to immunisation and vaccination. Two important events occurred. Triple vaccination which confers protection against diphtheria, whooping cough and tetanus was introduced in February and proved acceptable to parents of babies because the number of injections is reduced. There have been no untoward reactions and 2,637 courses of three injections were given. Separate injections have still to be given for poliomyelitis and the next development will undoubtedly be a quadruple vaccine which will confer protection against diphtheria, whooping cough, tetanus and poliomyelitis.

The estimated percentage of children under 5 years of age immunised against diphtheria is 63%, a slight increase on the corresponding figure for the previous year. Probably the acceptance of the triple vaccine which contains diphtheria antigen is responsible for the slight rise in the rate. Diphtheria, however, has appeared in several parts of the country and in face of this danger the immunisation rate of 63% cannot be regarded with equanimity. Members of the staff, however, are aware of the position and are doing what is possible to persuade more parents to have their children protected.

The other outstanding event was Northants. Polio Week. After suitable publicity in the press and by other means some 10,000 persons were vaccinated in a week during the spring. This was undoubtedly a notable achievement and reflects credit on the officers on the staff who organised the campaign, and on all members who worked hard to make the campaign successful.

The decline in the incidence of tuberculosis continued. Despite a more intensive search for cases by Mass Radiography and contact tracing, the number of new cases notified was 119 which was three less than the previous year. Of 95 cases of respiratory tuberculosis, 56 occurred in males and 39 in females. Most of the male patients (37) were over 35 years of age, and in contrast the majority of female patients (29) were under this age. The greater incidence of tuberculosis amongst men compared with women is presumably related to the increased danger of infection at work, travelling and so on.

As Members of the Council are aware, for some years a special interest has been taken in tuberculosis in the Boot and Shoe trade. When the Mass Radiography Unit made the first survey in 1945-46 a report on the findings was published.¹ A similar survey² four years later in 1949-51 was the subject of a study by Dr. O. E. Fisher. Recently Dr. G. Gerrard, the Medical Director of the Mass Radiography Service has kindly given me the statistics relating to the survey of 1957-58. The three surveys are compared in the following table:

			<i>Boot and Shoe</i> <i>Rate per 1,000</i>	<i>Other Occupations</i> <i>Rate per 1,000</i>
1st Survey, 1945-6	...	...	6.15	3.49
2nd Survey, 1949-51	...	...	1.45	1.23
Latest Survey 1957-58	...	...	0.97	0.68

The first survey revealed that the incidence of tuberculosis in the staple trade was definitely higher than in other occupations. By the time of the second survey there had taken place a marked fall in the incidence, affecting the boot and shoe trade and other occupations. The marked excess in the trade, shown in the first survey, had largely disappeared, the rate being only slightly greater than in other occupations. The latest survey has manifested the same trends. The disease is again reduced but in the boot and shoe trade there is still a slightly higher incidence than in other industries.

The history of tuberculosis in the Boot and Shoe trade was studied by Dr. Alice Stewart of the Institute of Social Medicine, Oxford, and is closely related to three factors, the mechanisation of the industry, the discovery of previously unknown cases by Mass Radiography and the effects of modern treatment, particularly Streptomycin discovered in 1948.

The introduction of machinery into shoe production about the middle of the last century was followed by significant epidemiological results; the shoemakers who had hitherto practised

¹ *Medical Officer*, 77, 169.

² *Tubercle*, Aug. 1952, 232.

their craft in a little work-room at the back of the house or in the garden now worked in factories with the consequent risk of spreading and contracting tubercular infection. From the time that work was transferred to factories a slow-moving epidemic of pulmonary tuberculosis developed. This was first noted by E. L. Collis in 1925.¹ The epidemic continued until the weeding out of chronic infective workers by Mass Radiography from 1945 onwards. The use of modern drugs was responsible for the fall in the disease throughout the whole population including the Boot and Shoe Industry, which has taken place since then. In 1960 the number of deaths in the County fell to thirteen and significantly there were no deaths from pulmonary tuberculosis under the age of forty-five.

The voluntary tuberculosis care committees remain as enthusiastic as ever in carrying out work on behalf of patients who suffer from tuberculosis. The committees, however, generously altered their constitution to extend their sphere of interest to non-tuberculous diseases of the chest and to diseases of the heart, and the Health Committee decided that this commendable action should be supported by making the grants for administrative expenses to cover this new work.

The County Council's chiropody scheme, under which grants under certain conditions are given to voluntary committees providing services for old people, was put into operation. After consultation with representatives of the Northamptonshire Advisory Committee for Old People's Welfare certain initial difficulties that had emerged were smoothed over and the scheme is providing a service that is much appreciated by old people throughout the County. Tribute is due to the enthusiastic voluntary committees who are responsible for running this service.

Dr. Mary G. H. Dickson retired after nineteen years devoted service to the County. A native of Northamptonshire, she joined the staff in 1938 and rapidly took all the duties of her post very much to heart and showed a practical interest in the welfare of members of the staff. At child welfare centres and school medical inspections her advice was given with the strength of a forceful personality, with the result that her clinics were always well attended. With mothers, children and teachers she was at all times popular. During the war she did not spare herself and gave special attention to her duties at the three maternity homes and three antenatal hostels administered by the Health Department. Dr. Dickson worked hard throughout her professional career to improve the health of the mother and child in the County and she left with the best wishes of all the members of the staff for a well-earned retirement.

Similar good wishes were expressed on the retirement of Mr. S. E. Bierton, who relinquished the post of Chief Clerk which he had held for seventeen years. During his period of office, Mr. Bierton was intimately concerned in the steady expansion of the work of the Department. His services were particularly valuable at the time of the many changes involved with the coming into operation of the National Health Service Act, 1946. He was at all times a most conscientious officer and was respected and liked by all members of the staff. His total service with the County Council extended to no less than forty-four years.

I have the honour to be,

Your obedient Servant,

CHARLES MILLIKEN SMITH,

County Medical Officer of Health.

¹ Journ. Stat. Med. 33,101.

SECTION A.

VITAL STATISTICS

Area of the Administrative County	578,947 acres
Population (Census 1951)	255,258
„ 1960, Mid-year estimate	292,690
Structurally separate dwellings occupied (Census 1951)	76,246
Private households (Census 1951)	78,067
Rateable Value (April 1st, 1960)	£3,527,942
Actual product of a penny rate (1959-60)	£14,171

	NORTHAMPTONSHIRE			ENGLAND & WALES
	<i>Male</i>	<i>Female</i>	<i>Total</i>	
Live births.....	2,665	2,518	5,183	
Live birth rate per 1,000 population.....				17.7
Illegitimate live births per cent of total live births				4.1
Stillbirths	50	36	86	
Stillbirth rate per 1,000 live and stillbirths ...				16.32
Total live and stillbirths	2,715	2,554	5,269	
Infant deaths.....	66	51	117	
Infant mortality rate :				
Total (per 1,000 live births)				22.57
Legitimate (per 1,000 legitimate live births)				22.53
Illegitimate (per 1,000 illegitimate live births)				23.47
Neonatal (first four weeks) mortality rate per 1,000 live births.....				15.24
Early Neonatal (under 1 week) mortality rate per 1,000 live births				13.12
Perinatal (stillbirths and deaths under 1 week combined) mortality rate per 1,000 live and stillbirths				29.22
Maternal deaths (including abortion)				2
Maternal mortality rate per 1,000 live and stillbirths				0.37
				0.39

Area. There has been no change in the area of Administrative County, which remains at 578,947 acres.

Population. The Registrar General estimated the resident mid-year population for 1960 to have been 292,690 as compared with 288,300 in 1959. The estimated populations for the Urban and Rural areas were 159,260 and 133,430 persons respectively. The natural increase in population, i.e., the excess of births over deaths, totalled 1,998 persons. The estimated increase in population was 4,390 and is largely accounted for by the continuous growth of Corby, where the population rose from 32,730 in 1959 to 34,700 this year.

Deaths. The total number of deaths assigned to the County by the Registrar General after adjusting for outward and inward transferable deaths, was 3,185 as compared with 3,106 in 1959. The crude death-rate based on the mid-year estimated population was 10.88 as compared with 10.77 in 1959. The ten chief causes of death accounted for 85.3% of the total deaths and are led by heart disease (35.7), cancer (16.7), vascular lesions of the nervous system (13.3), bronchitis (4.8), other circulatory diseases (4.6), pneumonia (4.3), accidents—excluding those involving motor vehicles (2.4)—accidents involving motor vehicles (1.2), congenital malformations (1.2), respiratory diseases excluding bronchitis and pneumonia (1.1).

Lists of the causes of deaths, classified under the thirty-six headings based on the Abbreviated List of the International Statistical Classification of Diseases, Injuries and Causes of

Death, 1948, as used in England and Wales, are given in Tables I and II (pages 62 to 65), whilst the history of the rate, together with other vital statistics for 1897-1960 are shown in Table No. VI (page 70). Comparability factors for each Urban and Rural District, Tables Nos. 1(a) and 1(b) (pages 62 to 63) have been provided by the Registrar General for adjusting the local birth and death rates. The comparability factors make allowance for differences in age and sex distribution, and when multiplied by the crude birth and death rates of an area, make them comparable with the rates of other areas similarly adjusted. For the last five years the death rate area comparability factors have been adjusted specifically to take account of the presence of any residential institutions in each area.

Births. The number of live births assigned to the County was 5,183 (comprising 2,665 males and 2,518 females) as compared with 4,800 in 1959, thus giving a birth rate of 17.7 per 1,000 of the population as compared with 17.1 for England and Wales.

Stillbirths. The number of stillbirths registered was 86 compared with 94 in the previous year. The rate per 1,000 total births was 16.32 as compared with 19.2 for 1959, and with 19.7 for England and Wales.

Infant Mortality. The number of infants who died before attaining their first birthday was 117 (66 males and 51 females) as compared with 97 in 1959. Of these 117 there were 5 illegitimate deaths. The rate per 1,000 related live births was thus 22.57 compared with 21.7 for England and Wales. The number of deaths and the rates for 1897-1960 are shown in Table VI (page 70), and an analysis of the apparent cause of 112 of them is given in Table II(a) (page 66). From this table it appears that the marginal rise in infant mortality was due to a slight increase in deaths from prematurity, congenital malformations, birth injuries and bowel infections, although these were partly compensated by a reduction in deaths from respiratory disease, infections and asphyxia. The rise in mortality is small and from the information available no clear deductions can be drawn about the causation. It should be appreciated that, whilst the general trend of the infant mortality in this County has been in a downward direction, occasional irregularities in the rate of decrease are very likely to occur.

Neonatal Mortality. This sub-division of the infant mortality includes all infant deaths within twenty-eight days of independent existence and of the total infant deaths, 79 were classed as neonatal. The rate per 1,000 live births was 15.24 compared with 13.33 for 1959 and with 15.6 for England and Wales.

Early Neonatal Mortality. This is a further sub-division of infant mortality relating to deaths under one week. There were 68 deaths representing 13.12 per 1,000 live births.

The main causal agent in neonatal deaths was prematurity.

Perinatal Mortality. There was a total of 154 cases (i.e., 86 stillbirths and 68 deaths under one week) in this category. The mortality rate was 29.22 per 1,000 live and stillbirths.

Maternal Mortality. Two women died from causes associated with childbirth as compared with three for the previous year. The maternal mortality rates per 1,000 live and stillbirths during the last decade were as follows :

	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Administrative County ... (Number of Deaths)	0.98 (4)	0.24 (1)	0.69 (3)	0.45 (2)	0.69 (3)	0.21 (1)	0.20 (1)	0.61 (3)	0.20 (1)	0.37 (2)
England and Wales	0.79	0.72	0.76	0.69	0.64	0.56	0.47	0.43	0.38	0.39

SECTION B.

General Provision of Health Services

STAFF

Assistant County Medical Officer of Health and School Medical Officer.

Mrs. Margaret V. Capon, M.B., B.S.Lond., took up duty on October 3rd in succession to Dr. Mary G. H. Dickson, who retired on August 8th after nineteen years' service in the County.

Dental Officers.

P. W. Gibson, Esq., L.D.S., was appointed Chief Dental Officer as from June 1st vice Mr. D. H. Goose.

F. E. Adams, Esq., L.R.C.P., L.R.C.S., L.D.S., R.C.S., was appointed Dental Officer at Kettering as from May 16th.

Chief Clerk.

Mr. S. E. Berton, who had worked in the Department for forty-four years, the last seventeen years as Chief Clerk, retired on April 13th and was succeeded by Mr. R. J. Bruce.

CARE OF MOTHERS AND YOUNG CHILDREN

(SECTION 22)

A. Care of Mothers.

(i) NOTIFICATION OF BIRTHS.

The number of births notified in the area under Section 203 of the Public Health Act, 1936, as adjusted by transferred notifications was :

	<i>Live Births</i>	<i>Stillbirths</i>	<i>Totals</i>
Domiciliary	1,894	15	1,909
Institutional	3,316	48	3,364
	<hr/> 5,210	<hr/> 63	<hr/> 5,273

Of the 1,909 domiciliary births, 1,822 were notified by midwives and 87 by doctors or parents.

Details of all notifications are transmitted promptly to the Health Visitors. In July, the rule of the Central Midwives Board relating to the lying-in period was amended so that health visitors began visiting after the tenth instead of the fourteenth day.

The following is an analysis of premature live infants and stillbirths (i.e., 5½ lbs. or less at birth, irrespective of the period of gestation).

1. *Number of Premature Live Births notified (as adjusted by transferred notifications).*

(a) In hospital	238
(b) At home	50
(c) In private nursing homes	—
Total	288

2. Number of Premature Stillbirths notified (as adjusted by transferred notifications).

(a)	In hospital	23
(b)	At home	1
(c)	In private nursing homes	—
	Total	24
		—

Weight at Birth	PREMATURE LIVE BIRTHS												PREMATURE STILLBIRTHS		
	*Born in Hospital			Born at home and nursed entirely at home			Born at home and transferred to hospital on or before 28th day			Born in nursing home and nursed entirely there			Born in nursing home and transferred to hospital on or before 28th day		
	Total	Died with- in 24 hrs. of birth	Survived 28 days	Total	Died with- in 24 hrs. of birth	Survived 28 days	Total	Died with- in 24 hrs. of birth	Survived 28 days	Total	Died with- in 24 hrs. of birth	Survived 28 days	Total	Died with- in 24 hrs. of birth	Survived 28 days
(a) 3 lb. 4 ozs. or less ... (1,500 gms. or less) ...	36	15	17	2	1	—	1	—	—	—	—	—	10	1	—
(b) Over 3 lb. 4 ozs. up to and including 4 lb. 6 ozs. ... (1,500-2,000 gms.) ...	56	2	52	6	1	5	—	—	—	—	—	—	7	—	—
(c) Over 4 lb. 6 ozs. up to and including 4lb. 15 ozs. ... (2,000-2,250 gms.) ...	42	—	42	3	—	3	1	—	—	—	—	—	4	—	—
(d) Over 4 lb. 15 ozs. up to and including 5 lb. 8 ozs. ... (2,250-2,500 gms.) ...	104	2	101	37	—	36	—	—	—	—	—	—	2	—	—
Totals ...	238	19	212	48	2	44	2	—	1	—	—	—	23	1	—

* The group under this heading includes cases born in one hospital and transferred to another.

The following information has been abstracted from previous reports regarding premature infants nursed entirely at home in the County :

INFANTS NURSED ENTIRELY AT HOME

Weight (lb)	1948			Weight (lb oz)	1955		
	Total	Survived	% Survival		Total	Survived	% Survival
Under 5½ lb	79	58	73.4	Less than 3¼ lb	1	—	—
Weight (lb)	1949			3¼ lb-4 lb 6 oz	2	2	100.0
	Total	Survived	% Survival	4 lb 7 oz-4 lb 15 oz	11	11	100.0
				5 lb-5½ lb	46	45	97.8
				Total	60	58	96.7
Less than 3 lb	8	—	—	Weight (lb oz)	1956		
3 lb-4 lb	9	3	33.3		Total	Survived	% Survival
4 lb-5½ lb	50	47	94.0				
Total	67	50	77.4				
Weight (lb)	1950			Less than 3¼ lb	3	1	33.3
	Total	Survived	% Survival	3¼ lb-4 lb 6 oz	5	5	100.0
				4 lb 7 oz-4 lb 15 oz	6	5	83.3
				5 lb-5½ lb	39	36	92.3
Less than 3 lb	4	—	—	Total	53	47	88.7
3 lb-4 lb	4	2	50.0	Weight (lb oz)	1957		
4 lb-5½ lb	52	48	92.3		Total	Survived	% Survival
Total	60	50	83.3				
Weight (lb oz)	1951						
	Total	Survived	% Survival	3¼ lb-4 lb 6 oz	2	2	100.0
				4 lb 7 oz-4 lb 15 oz	13	12	92.3
				5 lb-5½ lb	39	39	100.0
Less than 2 lb 3 oz	1	—	—	Total	54	53	98.2
2 lb 3 oz-3¼ lb	3	2	66.6	Weight (lb oz)	1958		
3¼ lb-4 lb 6 oz	7	5	71.4		Total	Survived	% Survival
4 lb 7 oz-4 lb 15 oz	10	9	90.0				
5 lb-5½ lb	36	35	97.2				
Total	57	51	87.7	Less than 3¼ lb	3	—	—
Weight (lb oz)	1952			3¼ lb-4 lb 6 oz	5	5	100.0
	Total	Survived	% Survival	4 lb 7 oz-4 lb 15 oz	5	5	100.0
				5 lb-5½ lb	36	36	100.0
				Total	49	46	93.9
Less than 2 lb 3 oz	1	—	—	Weight (lb oz)	1959		
2 lb 3 oz-3¼ lb	1	1	100.0		Total	Survived	% Survival
3¼ lb-4 lb 6 oz	7	6	85.7				
4 lb 7 oz-4 lb 15 oz	7	6	85.7				
5 lb-5½ lb	43	39	90.6	Less than 3¼ lb	—	—	—
Total	59	52	88.1	3¼ lb-4 lb 6 oz	1	1	100.0
Weight (lb oz)	1953			4 lb 7 oz-4 lb 15 oz	5	5	100.0
	Total	Survived	% Survival	5 lb-5½ lb	43	41	95.3
				Total	49	47	96.0
				Weight (lb oz)	1954			Less than 3¼ lb	2	—	—
Total	Survived	% Survival	3¼ lb-4 lb 6 oz		6	5	83.3
			4 lb 7 oz-4 lb 15 oz		3	3	100.0
			5 lb-5½ lb		37	36	97.3
Less than 3¼ lb	4	—	—	Total	48	44	91.66
3¼ lb-4 lb 6 oz	9	7	77.7	Weight (lb oz)	1960		
4 lb 7 oz-4 lb 15 oz	5	4	80.0		Total	Survived	% Survival
5 lb-5½ lb	18	18	100.0				
Total	36	29	80.5				
Weight (lb oz)	1954			Less than 3¼ lb	2	—	—
	Total	Survived	% Survival	3¼ lb-4 lb 6 oz	6	5	83.3
				4 lb 7 oz-4 lb 15 oz	3	3	100.0
				5 lb-5½ lb	37	36	97.3
Less than 3¼ lb	2	—	—	Total	48	44	91.66
3¼ lb-4 lb 6 oz	3	1	33.3	Weight (lb oz)	1960		
4 lb 7 oz-4 lb 15 oz	10	10	100.0		Total	Survived	% Survival
5 lb-5½ lb	33	31	93.9				
Total	48	42	87.5				

It will be seen that the total survival rate in the County has been over 87% for the last seven years and in 1960 was 91.66%. This is considered to be a good record and reflects the special interest which the Midwives have taken in the care of premature babies at home.

Transport to Barratt Maternity Home.

In March, 1957, arrangements were made with Mr. R. Watson, Consultant Obstetrician and Gynaecologist, whereby on receipt of a telephone message from the District Nurse an ambulance will call at the Barratt Maternity Home to collect the appropriate equipment and then proceed with a nurse to the home of any premature baby needing admission to the special unit.

Thirty-six babies were admitted in this manner.

(iii) OPTHALMIA NEONATORUM AND PUERPERAL PYREXIA.

No cases of Ophthalmia Neonatorum were notified.

Twenty-six cases of Puerperal Pyrexia were notified ; 4 were domiciliary confinements and 22 institutional. All cases recovered.

(iv) DEATHS ASCRIBED TO PREGNANCY OR CHILD BIRTH.

The Registrar General reported two maternal deaths.

The causes of death were :

- (a) Postpartum haemorrhage, cervical laceration, acute tubular necrosis, amniotic fluid embolism.
- (b) Acute cardiac failure due to haemopericardium, ruptured aortic aneurysm, medial necrosis of aorta, congenital aortic stenosis and pregnancy.

The first death occurred in a maternity home outside the County area and the second in a hospital in the County.

The death rate per thousand live and still births was 0.37.

The rate for England and Wales was 0.39 per thousand live and still births.

(v) ANTENATAL CLINICS.

There were eight clinics ; sessions were held thrice weekly at Northampton, twice weekly at Kettering, weekly at Corby, twice monthly at Daventry and Wellingborough, and monthly at Thrapston, Rushden and Towcester. The Desborough clinic closed in July.

ANTENATAL CLINICS

Clinic	No. of Sessions	Attendances				Average attendances	
		Primary	Subsequent	Post-natal	Total	Per case	Per session
Corby	51	172	746	27	945	5.5	18.5
Daventry	24	67	303	17	387	5.8	16.1
Desborough	7	11	32	5	48	4.4	6.9
Kettering	103	310	1549	48	1907	6.2	18.5
Northampton	139	413	1773	80	2266	5.5	16.3
Rushden	19	33	125	20	178	5.4	9.4
Thrapston	12	59	117	10	186	3.2	15.5
Towcester	19	58	142	11	211	3.6	11.1
Wellingborough	24	87	325	19	431	5.0	18.0
Total	398	1210	5112	237	6559	5.4	16.5

The attendances showed a decrease compared with previous year when the number was 7,071.

The midwives continued to give talks on various subjects at the antenatal clinics.

ANALYSIS OF RETURNS AS BETWEEN MIDWIFERY, MATERNITY AND HOSPITAL BOOKED CASES.

A. *Attendances.*

(i) No. of new cases, i.e. women who had not previously attended a clinic during current pregnancy	1,210
(ii) No. of patients who attended for antenatal supervision during the year :	
(a) Domiciliary midwifery cases	14
(b) Domiciliary maternity cases	296
(c) Hospital cases	1,278
	<hr/>
	1,588
	<hr/>

B. *Details of Maternity Cases.*

(i) Due to be delivered at home :	
(a) Cases where the doctor undertook to attend the delivery	132
(b) Cases where the doctor stated he wished to be called only if required	164
	<hr/>
	296
	<hr/>
(ii) Due to be delivered in hospital :	
(a) Maternity cases who attended once only for booking	37
(b) Maternity cases who continued to attend for antenatal supervision	1,209
	<hr/>
	1,246
	<hr/>

(vi) POSTNATAL ATTENDANCES.

A total of 237 postnatal attendances was made at the antenatal clinics.

(vii) BLOOD TESTS.

Specimens were examined by the National Blood Transfusion Service at Oxford and the Pathological Department of Kettering and District General Hospital for determination of the Rh factor and haemoglobin estimation.

(viii) RELAXATION CLASSES.

Classes were held by district midwives in 24 districts. Midwives have not been asked to give accurate returns of the number of mothers who attend, but it is known that there were at least 1,925 attendances. Some of the midwives, however, organise relaxation classes on their own initiative. At least one midwife in the County holds relaxation and mothercraft classes in her flat and to one of the sessions the husbands are invited, and light refreshments are provided for all the members of the class.

(ix) MATERNITY ACCOMMODATION.

At the request of the Management Committees the booking of cases on social grounds continued to be carried out by the Department. It is essential that the Local Health Authority should be able to select the cases to be admitted on account of social conditions as their officers are best acquainted with the domestic circumstances of each case. The arrangements between the Health Authority and the Management Committees have worked smoothly.

The numbers of cases booked each month were :

Northampton and District Hospital Management Committee—		
Barratt Maternity Home.....		32-40
Kettering and District Hospital Management Committee—		
St. Mary's Hospital, Kettering		35
Park Hospital, Wellingborough :		
Patients attended by own doctor	45	
Others (i.e., cases from outside* " area of access ")	14	
		— 59

* Women whose family doctors are not on the list of general practitioners authorised to attend their patients in the maternity unit.

Three hundred and fifty-six cases were referred to the consultants for admission on social grounds to the Barratt Maternity Home.

Two hundred and forty-two women were admitted to hospital in labour.

The following table shows the number of women who were confined in Nursing Homes, Maternity Wards and in their own homes.

<i>Where confined</i>	<i>Number of Births</i>	<i>Percentage of Total</i>
Nursing Homes*	18	0.3
Maternity Wards*.....	3,346	63.4
At home	1,909	36.2

* Including Nursing Homes and Maternity Wards outside the County Area.

(x) MATERNITY HOME, CORBY.

The building of this home by the Oxford Regional Hospital Board was started.

(xi) MATERNITY AND NURSING HOMES.

The homes on the register at the time of reporting were :

1. " Woodfield " Nursing Home, 36 Wellingborough Road, Finedon (*Maternity and Medical*).
2. " Townsend " Nursing Home, Upper Benefield (*Convalescent or elderly*).
3. " Quarries " Nursing Home, Silverstone (*Tuberculous ambulant or elderly chronic sick*).
4. " St. Christopher's " Nursing Home, Croughton, nr. Banbury (*Non-maternity*).

The total number of beds provided is 32.

(xii) MOTHERS' CLUBS.

Mothers' Clubs are held at Corby (2) and Kettering. The Health Committee allowed the free use of the clinic premises at School Lane, Kettering and Rockingham Road, Corby, for monthly meetings. All clubs were doing well at the end of the year.

(xiii) CARE OF UNMARRIED MOTHERS.

The County Council guaranteed payment for each approved case admitted to St. Saviour's Diocesan Maternity Home, Northampton, and similar homes. The girls were asked to pay 40/- per week whilst receiving full maternity allowance, the balance being paid by the Health Committee. Any payment from the putative father was deducted from the final account.

Forty-nine unmarried mothers were admitted under the above arrangements.

A close liaison between the Peterborough Diocesan Council of Moral Welfare and the Health Department has been maintained. The Council was given a grant of £650 for work undertaken by them on behalf of the County Council.

(xiv) BIRTH CONTROL CLINICS.

Twenty-three women attended the Northampton Women's Welfare Association Clinic and 2 women attended the Rugby Family Planning Clinic. At the Kettering Clinic, which is administered by the County Council, there were 24 sessions and 142 women made a total of 496 attendances.

B. Care of Children.

(xv) CHILD WELFARE CENTRES.

There were 55 Child Welfare Centres in the County. The table on page 16 shows details of the activities carried out at each Centre.

The number of children under one year who attended for the first time was 3,217 representing 61.7 per cent of the total registered live births.

The total number of attendances at all Child Welfare Centres by children under one year of age was 27,160, and by children between the ages of one and five years 19,499, showing an increase of 1,230 in the total attendances compared with the previous year.

The number of child welfare sessions per 1,000 population under five years of age was 45.9.

In order that the child welfare centres may serve the widest possible areas, facilities were provided, free of charge, for mothers and children under five years of age to be conveyed by special buses to twenty-two centres. The number of bus journeys was 237, and 2,756 mothers and 3,558 children were carried.

The work of the clinics is being gradually altered to meet modern demands. For example, in rural areas, inevitably a fair amount of work is devoted to immunisation and vaccination. Increasing attention, however, is being paid to mental aspects of minor disturbances in behaviour of young children and to advice to the mother on the management of these problems. Health education is primarily directed at the prevention of accidents, immunisation and vaccination, and child management.

CHILD WELFARE CENTRES

NAME OF CENTRE	AVERAGE NO.	AVERAGE NO. OF		NO. OF SESSIONS
	OF CHILDREN	CONSULTATIONS	ATTENDANCES	
	ATTENDING PER SESSION	PER DOCTOR'S ATTENDANCE	BY DOCTOR	
Barton Seagrave	20	—	—	22
Boothville	60	23	21	21
Boughton	27	13	11	11
Bozeat	25	12	11	11
Brackley	55	27	11	11
Brigstock	35	17	10	11
Brixworth	41	15	11	11
Broughton	27	14	11	11
Burton Latimer	50	12	11	22
Cold Ashby and Welford.....	34	10	11	11
Collyweston	29	23	11	11
Corby (Health Clinic)	45	19	49	49
Corby (Beanfield)	66	29	21	21
Corby (Diagnostic Centre)	50	17	50	50
Corby (Elizabeth St.)	70	23	22	22
Daventry	31	20	22	22
Deanshanger	38	14	11	11
Desborough	59	17	11	21
Duston	60	28	22	22
Earls Barton	30	28	12	22
Finedon	23	17	11	11
Geddington	43	13	11	11
Gretton	24	20	11	11
Hackleton	29	20	11	11
Higham Ferrers	51	19	22	22
Irchester	60	23	11	22
Irthlingborough (St. Peter's Hall)...	35	31	11	11
Irthlingborough (Palmer Avenue)...	27	22	11	11
Kettering (School Lane)	35	10	148	148
Kettering (St. John)	22	12	10	22
Kings Cliffe	10	9	11	11
Kislingbury	44	15	11	11
Long Buckby	27	19	11	11
Middleton Cheney	38	14	11	11
Moulton	58	28	11	11
Oundle	28	14	11	11
Potterspury	28	7	11	11
Raunds	22	15	11	11
Roads	36	23	11	11
Rothwell	45	18	11	22
Rushden.....	81	24	45	46
Silverstone.....	36	19	11	11
Spratton.....	25	14	11	11
Thrapston	18	17	11	11
Towcester	39	30	11	11
Weedon	26	17	11	11
Weldon	29	25	11	11
Wellingborough (Oxford Street) ...	52	22	58	59
Wellingborough (St. Andrew's)	40	26	22	22
West Haddon	36	16	11	11
Weston Favell	58	29	22	44
Wollaston	40	17	11	22
Woodford	24	18	11	11
Woodford Halse	33	20	11	11
Yardley Hastings	61	32	11	11

(xvi) CHILD GUIDANCE.

No arrangements were made for members of the Child Guidance team to visit the medical and nursing staff of Child Welfare Clinics because the team were too busy with children of pre-school and school age. There is a considerable waiting list of cases to be seen at the Child Guidance Clinics and the Regional Hospital Board have been asked to appoint an additional psychiatrist who would make child guidance and child psychiatry his main field of work. The present consultant, Dr. P. H. Rogers, is also Deputy Superintendent of St. Crispin Mental Hospital.

(xvii) ORTHOPAEDICS.

The clinics organised by Manfield Orthopaedic Hospital continued their valuable work. Children under 5 years of age whom the Medical Officers at Child Welfare Centres recommended should be seen by an Orthopaedic Consultant, were referred to the appropriate clinic, after the family physician had been informed.

(xviii) SPEECH THERAPY.

Children under five with speech defects are referred to the Speech therapists. Twenty-five children were treated.

(xix) DENTAL CARE.

Report of the Chief Dental Officer

Policy governing dental treatment for maternity and child welfare patients continues to be controlled by the staff available and many expectant and nursing mothers receive dental treatment by general dental practitioners under the National Health Service.

The staff position regrettably does not enable us to meet our full commitments to the priority classes, but additional full-time officers are not likely to be attracted to the Service as long as greater remuneration can be obtained in general practice, which is sometimes combined with local authority work on a sessional basis.

Of all diseases in Europe, dental caries is the most prevalent in children under five years and its incidence remains appalling. By the time the average child begins his school career he will have about five or six decayed teeth, some of which will already have been filled or extracted. Despite improved standards of living, more dental treatment and closer attention devoted to the welfare of the expectant mother, there has been a progressive deterioration in dental health since the first post-war years when supplies of sweets and sugar became unrationed. Sorry as I am to report it, I now see many young children in whom dental decay has advanced to such a degree that the front teeth have all rotted down to the gums.

The expansion of treatment services, although necessary, is obviously not the answer to the problem of *preventing* dental decay. To reduce this growing plague, children must be prevented from eating sweets, biscuits and lollipops BETWEEN meals. There is neither a desire nor a need to stop altogether the enjoyable consumption of confections, which must be restricted to normal mealtimes. We must also insist on children either brushing their teeth or rinsing their mouths thoroughly with water after a meal. The adoption of these simple rules would make an appreciable contribution towards reducing the incidence of grossly decayed teeth in very young children.

P. W. GIBSON.

TABLE I.
(a) Numbers provided with dental care :

	<i>Examined</i>	<i>Needing Treatment</i>	<i>Treated</i>	<i>Made Dentally Fit</i>
Expectant and Nursing Mothers ...	123	61	61	44
Children under five	469	403	403	254

(b) Forms of dental treatment provided :

	<i>Ex-trac-tions</i>	<i>General Anaesthetics</i>	<i>Fill-ings</i>	<i>Scalings and gum treatment</i>	<i>Silver Nitrate treatment</i>	<i>Radio-graphs</i>	<i>Dentures provided</i>	
							<i>Complete</i>	<i>Partial</i>
Expectant and Nursing Mothers	209	35	94	26	4	7	25	20
Children under five	433	211	119	—	211	1	—	—

(xx) DEFECTIVE VISION.

One hundred and forty-seven children under five years of age were examined by the Ophthalmic Consultants of the Hospital Board and, of this number, seventy were new cases.

(xxi) ASCERTAINMENT OF DEAFNESS IN YOUNG CHILDREN.

The importance of carrying out simple screening tests in order to detect the possibility of deafness among children is well recognised by Health Visitors. Except those with the heaviest case loads, all try to carry out these tests routinely on all infants, and 878 children were tested. In other cases they are carried out in the presence of any sign suggesting backwardness in talking or responding to the parent's voice.

Dr. J. V. Dyer, Assistant County Medical Officer of Health, attended a course for medical officers at the Department of Education of the Deaf on screening tests of hearing of young children.

(xxii) CARE OF ILLEGITIMATE CHILDREN (MINISTRY OF HEALTH CIRCULAR 2866).

Of the 215 illegitimate births in the County, 133 cases were brought to the notice of the Moral and Social Welfare Workers.

The following table shows details of the cases.

1. Total number of cases brought to the knowledge of the Moral and Social Welfare Workers	133
2. <i>Source of Reference :</i>	
1. Medical Practitioners	46
2. Health Visitors	6
3. District Midwives and Nurses (including cases referred by C.M.O.H.)	—
4. Almoners and other social workers	26
5. Private individuals, etc.	55
3. <i>Classification :</i>	
1st illegitimate	108
2nd illegitimate.....	4
3rd illegitimate +.....	4
“ Illegitimate ” of married women	17
4. <i>Ages of Mothers :</i>	
Up to 15 years	5
16-21 years	65
21-25 years	32
25-30 years	13
30+ years	14
Unknown	3

5. *Confinement Arrangements :*

1. Park Maternity Home, Wellingborough.....	6
2. St. Mary's Hospital, Kettering	9
3. Barratt Maternity Home, Northampton	11
4. St. Edmunds Hospital, Northampton	5
5. Moral Welfare Homes	43
6. Other Homes or Hostels	16
7. At home	8
8. Incomplete	34
9. Died before confinement	1

6. *Final arrangements made for Babies' Welfare at age of 6 months so far as can be ascertained, including incomplete cases brought forward from last year (1st July, 1959—30th June, 1960)—*

Parents married or co-habiting	—
Remaining with mother	12
Remaining with mother and grandmother	23
Adopted	28
Admitted to Part III. accommodation	—
Mother and child left area	8
Admitted to Homes (voluntary or Local Authority)	7
Boarded-out	4
Unknown	6

7. *Financial Arrangements :*

Assisted by Local Health Authority	49
Grants from Voluntary Organisations	1
Affiliation Orders	3
Voluntary payments.....	28

8. Babies died within one year of birth

3

STATISTICS OF ILLEGITIMACY

Year	Number of live births			Percentage of illegitimate births	No. of unmarried mothers assisted by grants	Infant Mortality Rate	
	Legitimate	Illegitimate	Total			Legitimate	Illegitimate
1930	2864	127	2991	4.2	8	40.85	70.86
1931	2809	115	2924	3.9	7	43.43	113.04
1932	2642	101	2743	3.7	—	44.28	79.20
1933	2576	89	2665	3.3	4	39.98	101.12
1934	2581	107	2688	3.9	9	56.17	84.11
1935	2777	104	2881	3.6	11	50.41	57.69
1936	2944	103	3047	3.4	13	47.55	58.52
1937	2992	112	3104	3.6	20	41.77	98.21
1938	3065	119	3184	3.7	13	39.15	92.43
1939	3211	125	3336	3.7	14	40.13	47.61
1940	3241	122	3363	3.6	8	46.90	89.43
1941	3356	155	3511	4.4	11	47.93	51.61
1942	3842	220	4062	5.4	20	32.53	66.18
1943	3922	288	4210	6.9	17	39.01	59.02
1944	4293	391	4684	8.3	17	35.87	61.38
1945	3866	474	4340	10.9	9	37.50	52.74
1946	4221	310	4531	6.8	14	37.19	32.26
1947	4636	269	4905	5.5	24	34.08	52.04
1948	4110	216	4326	4.9	22	29.68	69.44
1949	3874	182	4056	4.6	27	32.52	60.44
1950	3812	183	3995	4.6	26	29.38	32.79
1951	3795	202	3997	5.0	26	25.30	24.75
1952	3831	175	4006	4.4	33	24.80	28.57
1953	4077	173	4250	4.1	46	23.79	46.24
1954	4080	218	4298	5.1	42	24.02	13.76
1955	3996	187	4183	4.5	41	20.02	37.43
1956	4370	201	4571	4.4	46	19.67	19.90
1957	4555	193	4748	4.1	38	21.95	36.20
1958	4623	186	4809	3.8	42	20.11	10.75
1959	4601	199	4800	4.1	41	20.43	15.08
1960	4970	213	5183	4.1	49	22.53	23.47

(xxiii) PREVENTION OF BREAK-UP OF FAMILIES.

Health Visitors continue to spend much of their time and energy on work with problem families. Their aims are to improve family relationships and to help resolve the many problems which arise. They offer advice about budgeting, home management, and the management of children and adolescents, so that the standard of living of these families can be improved and a reasonably happy family life achieved.

This subject is dealt with further under "Health Visiting" (Section 24) on page 24.

(xxiv) NURSERIES AND CHILD-MINDERS REGULATION Act, 1948.

At the time of reporting the premises registered under the above Act were :

"Oakroyd" Day Nursery, Finedon Road, Wellingborough (18 places).

"Willow Edge," Barby (9 places).

25 Back Lane, Hardingstone (6 places).

(xxv) RUSHDEN HEALTH CLINIC.

In my Annual Report for 1959, I stated that a site had been purchased in Woburn Place and the County Architect had prepared plans which were being submitted to the Ministry of Health for approval. After consultation with the appropriate officers at the Ministry, the plans were completed and bills of quantity were drawn up. At the time of reporting, a tender has been accepted and it is hoped that building will commence in June, 1961.

(xxvi) DISTRIBUTION OF WELFARE FOODS.

The items distributed were :

1. National Dried Milk (full cream and half cream)	75,062
2. Cod Liver Oil	17,363
3. Vitamin A and D Tablets.....	13,732
4. Orange Juice	144,684
	<hr/>
Total	250,841
	<hr/>

In addition to the above, 320 tins of National Dried Milk and 12 bottles of orange juice were issued to hospitals which normally receive supplies direct from depots, unless only small quantities are required.

At the end of the year, there were 163 Centres distributing Welfare Foods throughout the County. A full-time centre was maintained at Northampton and part-time centres continued at Corby, Daventry, Kettering, Raunds, Rushden, Towcester and Wellingborough, manned by County Council staff. The remaining 155 were voluntary centres, of which 32 were at Child Welfare Centres.

Thanks are due to the voluntary helpers—many of whom store and distribute the foods from their own homes—for their very valuable assistance in maintaining these centres.

Supplies were received from Associated Deliveries Ltd. depot at Bedford.

Proprietary dried milks, baby cereals, and vitamin and other preparations, sold at the Northampton Centre and at Child Welfare Centres during the financial year ended March 31st, 1960, amounted to a total value of £5,143.

(xxvii) CAUSES OF DEATH OF CHILDREN UNDER ONE YEAR.

Details of these are given in Table II(a). Prematurity and congenital malformations together account for more than half of such deaths, the toll of infectious disease and birth injuries having steadily fallen over the years with advances in medical knowledge. It would now appear that medical endeavour must be concentrated on the problems of prematurity and of congenital defects. A register of the latter is being kept by the County Health Department and it is hoped that this may provide epidemiological information which may help to elucidate the cause of some of these malformations.

MIDWIFERY (SECTION 23)

(i) MIDWIFERY AND MATERNITY SERVICES.

The following table shows the numbers of cases attended by midwives (employed by the former County Nursing Association or by the County Council) from 1939 :

DOMICILIARY CONFINEMENTS

Attended by Midwives (Former County Nursing Assn., or County Council)

<i>Year</i>	<i>As Midwives</i>		<i>As Maternity Nurses</i>		<i>Total</i>
	<i>No.</i>	<i>Per cent.</i>	<i>No.</i>	<i>Per cent.</i>	
1939	1149	53	1036	47	2185
1940	1165	53	1040	47	2205
1941	1220	55	998	45	2218
1942	1260	51	1209	49	2469
1943	1094	45	1330	55	2424
1944	1165	44	1505	56	2670
1945	1052	47	1204	53	2256
1946	1074	44	1364	56	2438
1947	1207	43	1620	57	2827
1948	963	42	1349	58	2312
1949	772	39	1216	61	1988
1950	765	41	1097	59	1862
1951	732	44	949	56	1681
1952	820	48	836	52	1656

From 1953, the Ministry of Health asked for the information to be shown in the form below.

<i>Year</i>	<i>Doctor not booked</i>		<i>Doctor booked</i>		<i>Total</i>
	<i>Doctor present at time of delivery of child</i>	<i>Doctor not present at time of delivery of child</i>	<i>Doctor present at time of delivery of child (either the booked doctor or another)</i>	<i>Doctor not present at time of delivery of child</i>	
1953 ...	15	454	531	769	1769
1954 ...	12	682	445	540	1679
1955 ...	16	555	425	696	1692
1956 ...	42	582	424	621	1669
1957 ...	54	513	408	719	1694
1958 ...	44	598	340	808	1790
1959 ...	74	525	326	896	1820
1960 ...	54	528	298	991	1871

(ii) MIDWIVES.

The non-Medical Supervisor of Midwives (Superintendent Nursing Officer) and her staff made 188 routine visits.

The number of midwives who notified their intention to practise in the area during the year was 113. Of these 82 were employed by the Council (including relief midwives) 25 by Hospital Management Committees, and 2 in a private nursing home. Four midwives notified their intention to act as maternity nurses.

Seven midwives attended refresher courses approved by the Central Midwives Board.
The Local Health Authority's midwives spent 1,787 nights on duty.

(iii) MEDICAL AID.

Medical aid was requested in 147 cases and 8 payments of fees were made to medical practitioners, whose assistance had been sought, as against 194 notifications and 9 payments in the previous year.

(iv) GAS AND AIR ANALGESIA.

The number of midwives employed by the Authority who were qualified to administer gas and air analgesia was 70, and 61 machines were provided. Of a total of 1,871 cases, 1,239 (66%) received analgesia. In 256 cases a doctor was present, and in 983 cases a doctor was not present at the time of delivery of the child.

(v) PETHIDINE.

Sixty-six midwives were authorised to administer pethidine. The drug was administered to 608 patients, comprising 145 cases when a doctor was present and 463 cases when a doctor was not present at the time of delivery of the child.

The percentage of patients receiving pethidine was 32.5.

Instructions have been given to the Superintendent Nursing Officer to pay special attention during her supervisory visits to ensure that all supplies of pethidine are accounted for.

(vi) TRILENE.

Eleven machines were provided and nine midwives were authorised to administer trilene on their own initiative. The analgesic was given in 314 cases (including 64 cases when a doctor was present).

(vii) MATERNITY OUTFITS.

Maternity outfits were available free of charge for all women confined at home. 2,064 outfits were distributed at a cost of £946.

(viii) PART II TRAINING.

Seven midwives were approved by the Central Midwives Board as midwife teachers and thirteen pupils were trained on the district. The opportunity of training pupils is much appreciated and tribute is due to the midwives who take part in the teaching for their enthusiasm. One of our midwife teachers moved to a larger house so that she could accommodate two pupils.

(ix) CARS FOR DISTRICT NURSE/MIDWIVES.

The number of cars in use at 31st December was :

(a) Provided by the County Council	61
(b) Owned privately	29
	<hr/>
TOTAL	90
	<hr/>

(x) HOUSES AND GARAGES.

At the time of reporting, ten houses in various districts and three cottages at Wellingborough are owned by the County Council. In addition, one house, which it is intended to purchase, is occupied by a nurse. Nineteen houses are rented by the County Council from District Councils and two from other sources.

In February, the County Council approved the erection of a pair of houses at the Pastures Estate, Daventry, for occupation by district nurse/midwives. Building commenced in 1961.

In May, the former Rushden district nurse's home, which accommodated three nurses and had been made into flats, was handed back to the General Purposes Committee. The Urban District Council kindly let a modern flat to the nurse who had been living in the home.

Nineteen garages are owned by the County Council. Fourteen garages are rented by the County Council from District Councils.

HEALTH VISITING (SECTION 24)

(i) STAFF.

The staff consisted of an Assistant Superintendent Nursing Officer, 30 whole-time Health Visitors, two part-time Health Visitors, and 13 Health Visitor/District Nurse-Midwives.

The establishment of Health Visitors was 39, including one Assistant Superintendent Nursing Officer.

(ii) CO-OPERATION BETWEEN HEALTH VISITORS AND MEDICAL PRACTITIONERS.

Co-operation with other branches of the Health Service continued, all of the Health Visitors are now provided with telephones.

(iii) VISITS.

Details of visits carried out are :

1. Antenatal	766
2. Infants	42,081
3. Children 1-2 years	17,035
4. Children 2-5 years	25,917
5. Tuberculosis cases	1,938
6. Mental Defectives	827
7. Infectious Disease cases	78
8. Other visits	5,202
9. " No access " visits	10,582
	<hr/>
	104,426
	<hr/>

The number of families or households visited was 14,260.

In addition, the Health Visitors made 1,419 attendances at Child Welfare Centres and gave 146 lectures to mothers. They also made the following attendances at clinics : chest clinics 444, diphtheria immunisation clinics 70, birth control clinics 29, B.C.G. and Mantoux sessions 85, poliomyelitis vaccination 292, and smallpox vaccination clinics 4. A total of 5,084 first visits was made to children under one year. Health Visitors also gave 262 lectures to other organisations, such as Women's Institutes, Townswomen's Guilds, Church groups and women's clubs.

(iv) MENTAL HEALTH.

The Health Visitors pay routine visits to mental defectives who are living in satisfactory homes and whose conduct is not markedly anti-social. Other defectives who require special supervision are visited by the Mental Welfare Officers.

(v) FAMILY WORK.

In most of the homes she visits the Health Visitor finds normal, happy families who, while they are able to do the best for themselves, frequently present minor difficulties on which they are anxious to obtain advice. Occasionally the difficulty is more than minor. There are, however, a relatively small number of families—either problem families or families with problems—who absorb a disproportionate amount of the Health Visitor's time, knowledge and thought. The following examples will be of interest.

1. One family had recently moved into a council house when the mother wrote to the County Medical Officer asking for help because her husband was making her very unhappy. The Health Visitor knew these parents and their eight children well. The couple had been married for twenty-two years, their eldest son is epileptic and is now at Borocourt, the third child is at Loddington Special School, the others appear bright and well. The father is Welsh, a little limited in understanding, but he is devoted to his wife and family, though he admits he is a little "firey". The mother's physical and mental health seems to be deteriorating, she is thin, frequently cries, and feels persecuted; she complains of neighbours talking about her, and of her husband's lack of understanding.

The Health Visitor called to see the family doctor to discuss the problem; he agreed to invite the couple to call and see him together so that he could assess the degree of mental ill-health and decide how best to help them. The Health Visitor continued to visit to give support and encouragement to both parents.

2. A typical problem family with six children under nine years of age live in a small village. The mother is extremely dim-witted and there is constant disharmony between the parents. When there were only three children the mother could not manage, so that the position gets progressively worse as the size of the family increases. They now have a council house, but it is smelly and very dirty. The youngest baby failed to thrive for the first few months, during which time the family doctor and the Health Visitor co-operated to visit frequently, until eventually the baby's condition gradually improved and his hold on life seemed more secure.

3. It is now commonplace to find families who have a television set but say they cannot afford a fireguard. This will probably continue to be the case until fireguards are supplied on hire purchase terms.

One coloured couple with two young children not only had a television set, they also had a large glossy radiogram, but no fireguard. When the Health Visitor pointed out how dangerous an unprotected fire was for the toddler, the mother kept repeating that they couldn't afford a fireguard and they only paid so much a week for the television set and radiogram. When the Health Visitor insisted the fireguard was the most important article, the mother giggled helplessly. The Health Visitor tracked the father down to where he was lurking behind the shed in the garden and extracted a promise from him that he would get a fireguard at the end of the week. It was in fact many weeks before he kept his promise.

4. A woman of low intelligence and no longer young appeared at the Maternity Hospital in advanced labour; she had not booked a bed or had any antenatal care. This poor woman had twins. For the first few weeks the Health Visitor called almost daily, often helping to feed the babies; she continued to visit weekly until they passed their first birthday. All this time she took the babies' woollies, shawl and pram covers to her own home to wash as the mother could not cope with them herself, and yet was unwilling to take her babies to the child welfare centre in clothing made conspicuous by its grubbiness. In this way the Health Visitor was able to ensure the regular attendance of this mother and her babies at the centre, and consequently the babies had been immunised by their first birthday.

5. In one town in the County, the Health Visitors regularly visit houses let out in single rooms. One of these, owned by a coloured man, seems to have a girl living in each room and not going out regularly to work. The Health Visitor calls to see a twenty-one year old girl and her third illegitimate baby (the other two are in care). In similar houses are coloured children and their parents, often the mother works in the daytime, and the father on a night shift. In one of these where the parents and three young children appear to sleep in one large double bed, the Health Visitor found an unguarded drip feed oil heater in the middle of the room, and as no doubt the father sleeps during part of the day, this constitutes a serious danger to the two active older children. He was, however, quite unresponsive to the plea that he should guard the fire, even when this was supported by true stories of accidents to young children.

6. In some family situations the problems are not so obvious. One such family, the B.'s, had been visited regularly; it was a comfortable home, satisfactory financial position, and a good, capable mother.

The Health Visitor became concerned because the mother looked ill and seemed depressed, she had a marked degree of deafness, and was awaiting a hospital bed for surgical treatment. Then one day the neighbour contacted the Health Visitor and asked her if she would see Mrs. B. privately, away from the children (it was the school holidays). This she did and found there was considerable disharmony between the parents; in fact, there was evidence that Mr. B. ill-treated his wife.

After discussing the problem with the Probation Officer, the Health Visitor called on the family at 7.00 p.m. and stayed discussing their difficulties until 9.30 p.m. She started by telling Mr. B. she was worried about his wife's health and periods of depression and wished to discuss the cause, and what could be done about it. He was friendly and most willing to talk freely. He said his wife was ill and unhappy because of her deafness, which caused friction between them. The husband worked overtime and was tired on coming home, and he felt frustrated when his wife did not hear what he said. This friction was making the older children unhappy, particularly was it affecting the eldest girl, aged 13 years, who was becoming difficult, and this problem was again intensifying the stress between the parents, as the father blamed his wife for lack of discipline in the home.

The Health Visitor went to see the Almoner at the Hospital and explained the situation. The Almoner was able to put forward the case so that she was admitted for surgery to relieve her deafness within three weeks of the problem coming to light, and the kind neighbour took care of the children.

The Health Visitor had a private talk with the eldest girl at the request of both parents and discussed her difficulties with her. After Mrs. B. returned home the family settled down and appeared much happier.

Some of the Health Visitors, especially the younger ones, take the problems that they encounter in the course of their work very much to heart, and, being conscientious, worry unduly about them.

The Health Visitors continued to develop their health education work in schools and are taking some part in the mothercraft classes for antenatal mothers. In this way they hope to help prepare the parents of the future for their tasks.

(vi) CARS FOR HEALTH VISITORS.

The number of cars used by Health Visitors increased by two and the position at 31st December was :

Number of cars	
(a) Provided by the County Council	8
(b) Owned privately	18
TOTAL	<hr/> 26 <hr/>

HOME NURSING (SECTION 25)

(i) STAFF.

At the end of the year, 8 whole-time (including one male) and 14 part-time district nurses, 53 whole-time and 5 part-time district nurse midwives and 13 whole-time health visitor/district nurse-midwives were employed.

The establishment was increased by one midwife and one district nurse for Corby, and is now 100, including 5 members of the supervisory staff.

In November, the Council agreed to one of the posts of Assistant Superintendent Nursing Officer being re-graded to Deputy Superintendent Nursing Officer, and also to the appointment of a Health Education Organiser in place of an Assistant Superintendent Nursing Officer.

(ii) CASES.

Details of cases attended and the number of visits paid are given in the following table :

(1)	Medical	Surgical	Infectious Diseases	Tuberculosis	Maternal Complications	Others	Totals	Patients included in (2)-(7) who were 65 or over at the time of the first visit during the year	Children included in (2)-(7) who were under 5 at the time of the first visit during the year	Patients included in (2)-(7) who have had more than 24 visits during the year
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Number of cases attended ...	5,133	1,581	10	61	147	495	7,427	3,420	583	1,124
Number of visits paid ...	96,776	24,169	58	2,054	1,137	14,681	138,875	60,908	3,309	48,874

The District Nurse is now being called upon to co-ordinate the social welfare of the patient and in this County she is the pivot on which the Home Help Service revolves. The nurses paid 10,909 non-nursing visits in connection with this service.

The same applies to the care of the aged. The nurses endeavour to keep the welfare of the old people in mind and often visit long before they need nursing care. Such casual visits have in the past been looked upon by the nurses as good neighbourly visits and not recorded, although they realise their great preventive value. Many of the nurses serve on the Old People's Welfare Committees, many in fact have been instrumental in their formation. In this way very close co-operation exists and problem cases are soon brought to light. A considerable number of patients and their homes have been completely rehabilitated as a result of the good relationship existing between the District Nurse, General Practitioner, Hospital Almoner, Home Help, National Assistance Officer, Public Health Inspector, Welfare Committee and W.V.S.—all working together as a team for the benefit of the aged person. These visits total 6,193.

Much of the home nursing work is concerned with old people suffering from chronic complaints and in these cases the voluntary societies are often able to give considerable help. In addition, close liaison is maintained with the National Assistance Board. Not infrequently the nurses are faced with unusual problems, and sometimes unusual measures have to be taken to remedy them.

The effectiveness of the Home Nursing Service in relieving the pressure on hospital beds is reflected in the speed of the turnover of hospital patients and the length of the hospital waiting lists.

In this County good co-operation exists between the Geriatrician, General Practitioners, Matrons, Almoners, District Medical Officers and the Home Nurses. When problems arise over the discharge or admission of patients the difficulties are usually settled by discussion between members of this group.

The Home Nurses endeavour to assess the total needs of their patients who are in hospital, and make great efforts to prepare the homes and find suitable home helps where required, so that patients may return home as soon as possible. The effectiveness of their work is demonstrated in the early discharges of hospital cases, the number of patients receiving regular twice daily and daily nursing visits, the high percentage of patients receiving regular injection therapy, and the considerable number of chronic sick, aged and frail ambulant patients who receive regular care and supervision from the Home Nurses supported by the Home Help Service.

(iii) NURSES' TRAINING SCHEME.

Full and active co-operation exists between the County Health Department and the Nurses' Training Schools at the Kettering and Northampton General Hospitals.

Miss W. M. Williams, Superintendent Nursing Officer, gives talks to the students in the Preliminary Training Schools and also to final year students. Visits for these students are arranged with midwives, district nurses, health visitors, combined workers, speech therapists and mental health workers. Visits are also paid to the County Health Department to see something of its administration. After the visits the students write reports and then attend a discussion with the Superintendent Nursing Officer. At the Northampton General Hospital, the Deputy County Medical Officer also takes part in the training of senior nurses.

Staff Meeting.

Dr. J. R. Tasker, M.R.C.P., Consultant Physician at Northampton General Hospital, lectured to the staff on "A Modern Approach to Diabetes Mellitus" in September.

AMBULANCE SERVICE (SECTION 27)

London-Yorkshire Motorway (M.1) and Birmingham Spur (M.45).

There are approximately 26 miles of this motorway in the Administrative County. Prior to the opening of the motorway an instruction was given to the ambulance staff that until experience of traffic conditions had been obtained ambulances must not cross except at access points and service areas. Within a few days of the opening of the motorway the staff were informed that they could use the emergency crossings over the central reservation but only under the following conditions :

- (a) The traffic must be light, as in the early morning.
- (b) The driver must have satisfied himself that there are no on-coming vehicles on either track for at least half-a-mile. Accordingly the emergency crossing selected must be one that is not near a bend and gives a good clear view in either direction.

Experience has shown that constant vigilance is required on the part of the ambulance staff in using an emergency crossing because the fast traffic moves on the inner lanes and in crossing over, the front and tail of the vehicle encroaches on to both lanes. During the day the crossing is generally carried out under the supervision of a Police Officer and invariably at night.

To afford protection to the staff white plastic jerkins with a large patch on the back and trimming on the armholes with scotch light material are worn and the ambulances are equipped with amber all-directional flashing warning lights. Even with all these precautions the ambulance men have to exercise extreme caution in moving about on the motorway. At the scene of an accident the ambulance is parked beyond the wrecked vehicles which act as a barrier against the risk of a collision with oncoming fast traffic. To recover casualties up the steep embankments which are to be found on certain parts of the motorway the vehicles have been equipped with a portable floodlight and sixty feet of cable, a Neil Robertson stretcher and two forty-foot lengths of rope. This equipment proved invaluable on the one occasion on which it was needed.

The calls on the ambulance service have not been unduly heavy, the total calls received during 1960 being 56. Some of the accidents have involved several vehicles and multiple deaths, while others have been of a minor character. On four occasions motorists have become indisposed, drawn their vehicles on to the hard shoulder and telephoned to report that they were not feeling well. In these instances the drivers have been taken to hospital.

A new station at Rushden, to house four vehicles with the necessary administrative accommodation, was officially opened on 14th June by the Chairman of the Rushden Urban District Council.

Following a request from the National Union of Public Employees that an attendant be provided with every ambulance to assist with stretcher cases, a survey of the number of stretcher cases conveyed without an attendant revealed that from 1st April to 31st July, 1959, the monthly average was 64 emergency and 138 non-emergency cases. It was decided that the conveyance of emergency patients without a trained attendant was fraught with certain dangers and, accordingly, the establishment of each station was increased by one extra driver.

Control Staff	...	...	...	...	2 Radio-telephony Operators.
					*3 Leading Drivers.
					1 Female Telephonist.

* These drivers are available to the Northampton Station when not employed on Control duties.

In the areas not covered by the County Council, the voluntary ambulance committees and the St. John Ambulance Brigade continue to provide a service on an agency basis. The larger voluntary organisations employ their own full-time staff to man their vehicles.

Radio Telephony.

There was no change in the number of vehicles equipped with radio-telephony. Of the 29 vehicles so equipped, 23 were directly operated by the Council and six by the voluntary agencies at Brackley, Daventry and Towcester.

Long Distance Journeys.

All journeys outside a radius of 40 miles from the ambulance station concerned are referred to the County Medical Officer of Health for approval. For long distance journeys, considerable use is made of the facilities offered by British Railways who provide a reserved compartment without payment other than the fares of the persons travelling. Ambulance transport is arranged to and from stations at both ends of the rail journey.

Accidents in Far Cotton, Northampton.

The Council acceded to a request from the Northampton County Borough Council to provide an accident service from the Mere Way Station for incidents occurring south of the Bridge Street level crossing. No charge is made for this service since the Corporation agreed to send ambulances to accidents in other areas adjoining the town if in an emergency the County Service is unable to make an immediate response. The service has been used on occasion.

Details of work undertaken.

						<i>Number of Patients Carried</i>			
						<i>Accident or Emergency</i>	<i>Others</i>	<i>Total</i>	<i>Mileage</i>
County Council Service									
Ambulances	...	...	...	...	...	4,641	35,802	40,443	272,419
Light Dual-Purpose Ambulances				...	...	767	33,081	33,848	255,955
Agency Services									
Ambulances	...	...	...	...	...	1,669	13,989	15,658	140,195
Light Dual-Purpose Ambulances				...	...	426	9,367	9,793	71,641
Supplementary Services									
Hospital Car Service...	...	...	...	...	...	7	2,655	2,662	45,182
Taxis	...	...	...	...	...	239	2,096	2,335	30,689
Total						7,749	96,990	104,739	816,081
<hr/>									
Railway Journeys	...	...	...	...	...	—	149	149	12,614

The following table shows the trend of the service since 1949 :

			1949	1950	1951	1952	1953	1954
Patients carried	...	...	20,666	28,013	46,206	50,113	57,907	69,368
Accidents or Emergencies			2,573	4,432	4,419	4,530	5,420	5,891
Mileage	...	...	561,187	654,036	700,215	673,446	750,421	811,813
Average miles per patient			—	—	15.2	13.4	13.0	11.7
			1955	1956	1957	1958	1959	1960
Patient carried	...	...	76,253	80,631	82,915	86,526	95,929	104,739
Accidents or Emergencies			5,821	5,167	5,562	5,997	7,428	7,749
Mileage	...	...	851,381	806,304	742,765	743,580	775,811	816,081
Average miles per patient			11.2	10.0	9.0	8.6	8.1	7.8

Prior to 1951, for statistical purposes a patient conveyed to and from hospital was regarded as one patient. Under a Ministry of Health instruction in 1951, a patient thus carried is counted as two patients. The number of patients carried continues to increase and this figure now exceeds 100,000 persons ; in fact, 358 persons were carried per 1,000 population.

As our ambulances are controlled by radio telephony the vehicles can be more economically deployed, thus effecting a gradual reduction in the average mileage per patient. This average reached its lowest level in 1960, viz., 7.8.

PREVENTION OF ILLNESS, CARE AND AFTER CARE (SECTION 28)

Provision of Nursing Equipment.

The County Council provide nursing equipment, such as wheel chairs, commodes, etc., for the use of patients in their homes. Most of the larger articles are sent out direct from the County Health Department, but, in addition, district nurses maintain small loan cupboards of their own.

Four more hydraulic hoists for lifting heavy patients were purchased. There are now nine hoists in use in patients' homes and this very useful equipment is proving a boon to bed-bound patients.

Convalescent Home Treatment.

Thirty-five patients, three of whom were children, were recommended for treatment, and vacancies were obtained at convalescent homes situated mainly at seaside resorts on the south coast. Adults were normally sent away for two weeks and children for four weeks.

Chiropody Service.

The County Council in November, 1959, recommended that the following amendments should be made to their proposals under Section 28 of the National Health Service Act, 1946 :

“ The County Council will provide directly or through voluntary organisations a chiropody service initially for (a) the elderly ; (b) the physically handicapped ; and (c) expectant mothers.

The service will be developed by the County Council as may be necessary to meet the needs of other classes of persons and of those members of the community who are unable to make their own arrangements.

The County Council will consult the voluntary organisations at present providing a chiropody service with a view to seeking their co-operation in continuing their activities subject to such financial and other terms as may be agreed with them.

The County Council will recover contributions from those receiving treatment under the service in accordance with a scale to be determined from time to time.”

After correspondence the Ministry of Health approved the proposals substantially in the same form as submitted.

The Health Committee, at their meeting on the 29th March, approved the conditions under which grants would be paid to voluntary committees providing a chiropody service. Under these arrangements, which operated from the 1st June, the Committees receive a grant of 75% of their total net expenditure, subject to the following conditions :

- (i) That the service be made available to all old age pensioners in the neighbourhood.
- (ii) That a minimum charge of 2/6 per treatment be recovered in respect of each patient.
- (iii) That if the chiropodist at present engaged does not hold approved qualifications he be allowed to continue, but, in the event of his resignation the Health Committee be notified so that, if possible, a qualified chiropodist can be appointed.
- (iv) That the payments made to the chiropodist by the voluntary committee do not exceed those laid down by the Whitley Council.
- (v) That domiciliary treatment be restricted to patients who are unfit to leave their homes.
- (vi) That the voluntary committee satisfy themselves that the chiropodist engaged is fully insured against all claims from negligence.
- (vii) That the voluntary committee request the chiropodist employed not to treat any patient suffering from diabetes without the approval of the family doctor.

Following a conference with representatives of the Northamptonshire Advisory Committee for Old People's Welfare, the Health Committee further decided that, as from 1st October, claims for reimbursement from voluntary committees could be extended to include :

Dressings : 10d. for each case treated on a sessional basis. The Whitley Council fees for patients seen at the chiropodist's own surgery (6/-) and for domiciliary visits (8/6) already include the cost of dressings.

Travelling Allowance : 9d. per mile for journeys exceeding two miles where the chiropodist attends patients on a sessional basis and for approved cases treated at home.

By the end of the year 47 claims had been received from 24 individual organisations such as Darby and Joan Clubs, Old People's Clubs organised by the W.V.S., Friendship Clubs and Old People's Welfare Associations. The number of treatments given was 2,055.

HOME HELP (SECTION 29)

The County Council do not employ whole-time home helps but continue to make extensive use of part-time helps who are found as and when necessary. In all areas the District Nurses and Health Visitors have knowledge of women who are prepared to act as home helps when required.

The Home Help Organiser, Miss E. Newell, covers urban areas in the east of the County, and works in association with the Superintendent Nursing Officer and her Assistants and with the local District Nurses.

Miss Newell has given me the following report on her work :

1. *Statistics.*

The number of visits totalled 2,665, of which 1,453 were revisits to patients and 1,212 were calls to home helps and enquiries with regard to domestic assistance in the home in cases of illness.

In addition, 98 new cases were authorised ; 49 in the Kettering area, 18 in Wellingborough, 22 in Rushden, and 9 in the Finedon and Irthlingborough districts.

At the end of the year, 275 cases were being provided with home help. The number of hours' help authorised is shown in the following table :

- (A) 179 cases having 2 to 4 hours weekly ;
- (B) 70 cases having 5 to 7 hours weekly ;
- (C) 19 cases having 8 to 10 hours weekly ;
- (D) 7 cases having 11 to 14 hours weekly.

As will be seen, the majority of cases are receiving only a small amount of weekly help ; these cover active but ageing folk who find difficulty in doing heavy housework and high dusting. Group B covers persons with a medium degree of incapacity, due perhaps to cardiac failure, arthritis or a stroke, and where apart from cleaning, help is needed for shopping and washing. Group C includes patients confined to bed for part of the day, or aged couples, usually 80 years and over, having no family to assist. High hours as in group D are generally only of a temporary nature to cover bedfast patients and those awaiting hospital admission.

2. *Home Helps.*

In a highly industrial area, domestic workers come low on the recruitment register, but throughout the year we have been fortunate in maintaining a band of regular and willing helpers who are available for alternative duties when existing cases cease. Many can be depended on to oblige in an emergency, but inevitably there are times when due to lack of reserve workers, home helps are not always readily available.

In November the first course for home helps was introduced, and covered Wellingborough, Rushden, Finedon, Irthlingborough and Higham Ferrers. The three classes were attended by 47 out of 61 helps working in the area and included demonstrations in home nursing and prevention of accidents in the home. There were also talks on diet and mental health and concluded with questions and general discussion. The course proved most successful and provided

the help with a better understanding of her work and duties, and the knowledge that she is part of a team working in the service of the community.

3. *Patients*

It all too often happens that elderly folk ready to leave hospital after an illness or operation have no family of their own to turn to for assistance, and friends like themselves are also ageing. Close co-operation is therefore maintained with local hospitals, and patients are sometimes visited prior to their discharge to advise and reassure them on assistance in the home.

A letter sent in by a home help on behalf of the elderly lady (74 years) she looks after—a chronic invalid, housebound, often confined to bed for several weeks at a time, having no family of her own—and from which I quote below was particularly gratifying to receive, as I am sure it echoes the thoughts and sentiments of all the elderly folk who, like this patient, are unable to express themselves :

“ Mrs. — has asked me to thank you for the help she has received from the Home Help Service. She says to tell you she finds it difficult to express herself when anyone is present, but she is really most grateful.”

The service provides for domestic assistance in all cases of illness, whether through the official County Scheme or on a private basis where the patient is financially able and willing to pay the full cost.

Details of cases assisted throughout the County are :

Type of Case							No. of Cases	Percentage of total
1.	Maternity (including antenatal and postnatal)	...	...	...	...	...	46	4.1
2.	Tuberculosis...	...	...	...	...	...	10	0.9
3.	Chronic Sickness (including aged and infirm)	...	...	...	...	...	969	85.6
4.	Acute Illness	...	...	...	...	...	99	8.7
5.	Others	...	...	...	...	...	8	0.7
Total							1,132	100.

In 1959 there were 1,171 cases.

There are considerable advantages in linking the home help service with the district nursing service, and particularly in the arrangements under which the Superintendent Nursing Officer or one of her assistants visits patients who have been receiving home help for more than a year.

This is not a free service and patients are required to contribute in accordance with a scale.

Patients receiving national assistance are charged 5/- per week, which they can reclaim from the National Assistance Board. An exception is made for blind persons receiving assistance because, in their cases, the Board cannot increase the allowance to cover the home help contribution, as the higher rate of benefit paid to blind persons is intended to cover domestic assistance amongst other things. The Committee decided, however, that they would not ask for a contribution from blind persons in receipt of national assistance. No charge is made to old-age pensioners with no other income.

Patients' contributions are collected by the District Welfare Officers, and the Welfare Committee charges a commission of 12½% on the amount collected, which in 1960/61 was £7,853.

The cost per 1,000 of the population was £101/18/-, and the cost per case £31/8/-. (Financial year ended March 31st, 1960.)

In recognition of the services of home helps, who often perform duties far beyond those required of them by the County Council in their efforts to assist patients, badges have been issued to those helps who have been employed by the Council for not less than a year and who work ten hours per week or more. Two weeks' holiday with pay is also granted to home helps who fulfil these conditions, the amount of pay being the average weekly earnings during the six months prior to the holiday.

SECTION C

Sanitary Circumstances of the Area.

WATER SUPPLY.

Rural Schemes. The following scheme was submitted for the observations of the County Council in accordance with the provisions of the Rural Water Supplies and Sewerage Acts 1944-1951 and was approved in principle.

<i>Authority</i>	<i>Schemes (Estimated Population)</i>	<i>Estimated Cost</i>
Mid-Northamptonshire Water	Harlestone—improvement to water supplies (483)	£14,500

SEWERAGE AND SEWAGE DISPOSAL.

Rural Schemes. The following schemes were submitted for the observations of the County Council in accordance with the provisions of the Rural Water Supplies and Sewerage Acts, 1944-1951, and were approved in principle.

<i>Authority</i>	<i>Schemes (Estimated Population)</i>	<i>Estimated Cost</i>
Brackley R.D.C.	Lower Middleton Cheney Sewerage Extension	£17,665
Brixworth R.D.C.	Thornby Sewerage and Sewage Disposal (174)	£14,600
Daventry R.D.C.	Flore Sewerage and extension of Weedon Sewage disposal works	£43,500
Kettering R.D.C.	Oakley Sewerage and Sewage Disposal (272)	£49,000
Oundle and Thrapston R.D.C.	Nassington Sewerage (464)	£38,250
	<i>(First phase of scheme approved in October, 1956).</i>	
Towcester R.D.C.	Shutlanger and Stoke Bruerne Sewerage (588)	£61,081
	Gayton Sewerage and Sewage Disposal (388)	£46,210
Wellingborough R.D.C.	Great Doddington Sewerage and Sewage Disposal (671)	£56,000
	Earls Barton Sewerage (2,800)	£106,250
	<i>(revised estimate—original at a cost of £66,900 approved in principle in 1956).</i>	

CONTRIBUTIONS UNDER THE RURAL WATER SUPPLIES AND SEWERAGE ACTS, 1944-1951.

The Ministry of Housing and Local Government having indicated the amount of grant by that department towards the cost of certain approved schemes of water supply or sewerage and sewage disposal, the County Council agreed to make the following contributions in accordance with the approved scale.

<i>Authority</i>	<i>Scheme</i>	<i>Estimated Cost</i>	<i>Ministry of Housing and Local Government Grant</i>	<i>County Council Contribution (Capital Sum)</i>
WATER SUPPLY				
Brackley R.D.C.	Water supply to Overthorpe Hall	£2,585	£500	£500
SEWERAGE AND SEWAGE DISPOSAL				
Daventry R.D.C.	Watford sewerage	£27,948	Half yearly payment of £200 for 30 years	£5,535
Kettering R.D.C.	Stanion sewerage	£34,750	Half yearly payment of £200 for 30 years	£5,700
Oundle and Thrapston R.D.C.	Nassington sewerage	£38,250	Half yearly payment of £230 for 30 years	£6,365
Towcester R.D.C.	Blisworth sewerage	£58,670	Half yearly payment of £450 for 30 years	£12,454
	Towcester and Paulerspury sewerage	£197,927	Half yearly payment of £1,200 for 30 years	£33,200

REVISION OF CONTRIBUTIONS.

The Ministry having revised their grants in aid of the undermentioned schemes, the County Council's contributions were also re-assessed as follows :

<i>Authority</i>	<i>Scheme</i>	<i>Estimated Cost</i>		<i>Ministry Grant</i>		<i>County Council's Contribution</i>	
		<i>Original</i>	<i>Revised</i>	<i>Original</i>	<i>Revised</i>	<i>Original</i>	<i>Revised</i>
Brackley R.D.C.	Farthinghoe main drainage	£34,791	£29,500	£880 p.a. for 30 years	£750	£11,597	£9,833
	Helmdon main drainage Stage No. 1	£33,964	£31,839	Half yearly payment of £400	£400	£11,321	£10,613
Daventry R.D.C.	Lilbourne sewerage	£7,350	£25,000	£200 p.a. for 30 years	Half yearly payment of £170 for 30 years	£2,450	£4,705
	Yelvertoft sewerage	£12,900	£38,400	£320 p.a. for 30 years	Half yearly payment of £240 for 30 years.	£4,300	£6,642
Oundle and Thrapston R.D.C.	North Western area water supply	£135,000	£115,000	£37,500	£2,122 p.a. for 30 years	£2,158 p.a. for 30 years	£2,132 p.a. for 30 years
	Easton-on-the-Hill sewerage	£42,500	£46,784	£21,000	£1,370 p.a. for 30 years	£14,333	£15,315
Northampton R.D.C.	Harpole and Kislingbury sewerage	£58,653	—	£30,000	—	£1,244 p.a.	£1,301 p.a.

SECTION D.

Rural Housing.

Provision of New Housing Accommodation.

Table showing the post-war record of Rural Housing Authorities up to 31st December, 1960, and the number of houses completed during 1960.

New Houses Built or Building by Rural District Councils.

<i>Rural Housing Authority</i>	<i>Popula- tion Est. 1960</i>	<i>No. under construction at 31/12/60</i>	<i>No. com- pleted up to 31/12/59</i>	<i>No. com- pleted during 1960</i>	<i>Total No. of houses completed at 31/12/60</i>	<i>No. of post-war houses completed per 1,000 of population</i>
Brackley	11,280	2 (10)	659	15 (8)	674	59.8
Brixworth	19,470	6 (—)	688	2 (—)	690	35.4
Daventry	16,190	20 (36)	897	44 (20)	941	58.1
Kettering	12,020	46 (4)	723	6 (36)	729	60.6
Northampton	26,560	28 (29)	1,658	31 (4)	1,689	63.6
Oundle and Thrapston	18,430	26 (42)	696	46 (12)	742	40.3
Towcester	14,660	24 (10)	1,055	14 (—)	1,069	72.9
Wellingborough	14,820	20 (18)	865	18 (57)	883	59.6
Totals	133,430	172 (149)	7,241	176 (137)	7,417	MEAN=55.6

Figures in parentheses show total for year ended 31st December, 1959.

The building of 7,417 post-war houses by the Rural Districts, whose total population is 133,430, represents one new house for every 18.0 persons.

Private enterprise has built 5,104 houses post-war in the rural districts, of which 571 were completed during 1960.

SECTION E.

Food and Drugs.

1. PUBLIC HEALTH : REGULATIONS.

Public Health (Preservatives, etc., in Food) Regulations, 1925-1953.

During the year the Public Analyst reported that 60 samples of food contained permitted preservative and in no case was the permitted maximum amount exceeded. There were no instances of non-declaration where declaration of preservative was required and no prohibited preservatives were found to have been used.

2. ADULTERATION, FOOD STANDARDS, ETC.

FOOD AND DRUGS ACT, 1955.

The Chief Inspector of Food and Drugs (Mr. A. E. Waller) reports :

The Public Analyst for the County (E. Voelcker, Esq., A.R.C.S., F.R.I.C.) examined 1,021 samples, an increase of 196 on the total for the previous year, and 49 were the subject of adverse comment. This gives a percentage of 4.8 of unsatisfactory samples compared with 4.48 per cent for the previous year. Last year's figure was, however, the lowest ever recorded and that of the year under review is the next lowest and does not reflect any real lowering of the general high compositional standard of food throughout the County.

The samples submitted were as follows :

Milk	396	Brought Forward	818
Channel Island Milk	85	Cakes and Puddings	10
Condensed Milk	10	Bread and Crispbread	5
Evaporated Milk	2	Flour	3
Cream	14	Biscuits	2
Ice-Cream	29	Baking Powder	1
Butter	25	Table Jelly	8
Margarine	10	Custard Powder	1
Lard, Dripping and Oil	14	Groats	1
Cheese and Cheese Spread	40	Fruit	5
Soup	13	Jams, Marmalade, Mincemeat, etc. ...	33
Fish Products	18	Soft Drinks	23
Meat Products	62	Milk Shake Syrup	1
Sausages and Sausagemeat	48	Tea and Coffee	7
Potatoes	20	Chocolate Drink	1
Vegetables	7	Wines and Spirits	52
Ice Lolly	1	Glucose Stout	1
Savoury Fritter Mixture	1	Sweets and Chocolates	9
Vinegar	9	Lemonade Powder	1
Condiments	11	Glace Cherries	1
White Sauce Mix	1	Medicines	37
Cream of Tartar	1	Glucose	1
Sweetening Pellets	1		
		TOTAL	1,021
Carried Forward	818		

The 1,021 samples submitted to the Public Analyst included notable increases in the numbers of foods of common consumption for which there are, at present, no legal requirements for compositional standard, but which are under consideration for possible fixed minimum standards. All formal samples and some informal samples of foods and drugs were submitted to the Public Analyst but informal samples of milk taken at schools, farms and dairies were tested in the Inspectors' offices.

The samples taken and examined were :

Milk samples submitted to the Public Analyst	481
Milk samples tested informally	487
Milk samples from schools—tested informally	107
Miscellaneous samples submitted to the Public Analyst	540
Samples purchased for purposes other than analysis	64
TOTAL	1,679

(For the year 1959 the total number was 1,430.)

MILK.

In all, 481 samples of milk were submitted to the Public Analyst, of which 85 were Channel Islands milk, 37 were Sterilised milk, 26 were farm-bottled T.T. milk, and 21 were “appeal-to-cow” samples. Of these samples 18 were adulterated and 22 were genuine milk of a quality below the presumptive standard for fat or solids-not-fat. As 16 of the 18 samples of adulterated milk were obtained from two sources, it is clear that there is no high incidence of watered milk. In both cases the water was attributed to faulty coolers. One other sample certified to contain a small amount of added water was an informal sample but several formal samples taken later from this source were all genuine.

Of the 22 samples of milk which were not adulterated but which were below the presumptive standard, two samples were deficient in both fat and solids-not-fat, 14 deficient in fat and 6 deficient in solids-not-fat. These samples recur every year, frequently from the same herds of heavy yielding breeds, and with the largest number in the spring and early summer months when milk is at its highest production. The Public Analyst quite correctly specifies a deficiency when it occurs, but frequently it is so minutely fractional as to be quite insignificant. To illustrate the point, 4 of the 8 samples certified to be deficient in solids-not-fat had a content of over 8.4 per cent and were less than 0.1 per cent below the presumptive minimum of 8.5 per cent.

The average fat content of all samples was the same as last year, 3.53 per cent (minimum standard, 3 per cent) and the solids-not-fat averaged 8.89 per cent (8.5 per cent). The solids-not-fat figure is slightly higher than that for the previous year.

The Channel Islands milk samples which should have minimum amounts of 4 per cent fat and 8.5 per cent solids-not-fat, gave average figures of 4.48 and 9.27 per cent respectively.

The 487 informal milk samples included a number of samples from farms known to be producing low standard milk at the flush period, but again, over the year the average contents were 3.5 per cent fat and 8.72 per cent solids-not-fat. Allowing for the natural variations in a biological food, the overall standard of quality throughout the year can be regarded as satisfactory.

MILK IN SCHOOLS.

107 samples of milk supplied to schools were tested chemically by the Inspectors for compositional quality. Again, the samples were all satisfactory, and there was no necessity for formal samples to be taken for submission to the Public Analyst. The average figures for school milks were 3.55 and 8.80 per cent.

In addition, 8 samples of raw milk passed the methylene blue test and the biological examination of the samples showed no evidence of T.B.

SAMPLES OTHER THAN MILK.

There was a substantial increase in the number of samples other than milk which were purchased for analysis, from 383 last year to 540 during the year under review. There are a number of foodstuffs for which there are statutory standards of composition, and routine sampling is, on the whole, effective in maintaining the fixed standards. There are, however, other foodstuffs which are being sold in increasing numbers, and in increasing varieties, for which there are no statutory compositional standards or even agreed codes of practice between manufacturers and bodies concerned with the enforcement of food legislation.

Meat products. Typical of such products are the various canned meats, e.g., meats with cereal, meat with gravy, meat with gravy and vegetable, and a host of other varieties. It is essential that at some future date some order is introduced into what is, at the present time, a chaotic situation and a continuously changing one. How much meat, and how much gravy, is of importance to the purchasing housewife. It may be 55 per cent or 75 per cent meat. If onions are added it may be as low as 35 per cent meat.

62 meat products of this kind were submitted and in several instances the manufacturers or importers were approached and the labels were amended so as to show that the product was "with gravy".

The evidence that is being obtained of the wide variations in the meat content of some canned meat products may be useful when statutory standards or codes of practice are under consideration.

A sample of Pork Meat was certified to contain 20 per cent additional water and 1 per cent flour. The product had been imported from China and had been in the country for some considerable length of time and, because of its poor quality, there was only the one trial purchase by the importers. A sample of canned Casserole Meat was certified to contain 30 per cent additional water and 2 per cent flour and was another imported product. The importers were cautioned and the overseas packers were suitably instructed by the importers to indicate on the label that the product was meat in gravy.

A sample of Pork Meat described on the label as "ALL MEAT" was found to have 20 per cent additional water and 8 per cent starchy filler. This was another imported product and, on the matter being taken up with the importers, the label was amended.

Sausages are another article of common consumption for which no standard of meat content has been prescribed, despite repeated appeals to the Minister of Agriculture, Fisheries and Food from manufacturers and enforcing authorities to make a Standards Order. Recommendations were made by the Food Standards Committee some few years ago, but enforcement is still left in the hands of food and drugs authorities and local magisterial benches. Fortunately, all the 48 samples of sausages taken in the County were considered to be satisfactory. Pork sausages are expected by Public Analysts to contain a minimum of 65 per cent meat, and the meat content of the purchased samples ranged from 65 to 78 per cent, with an average of 69.1. Beef sausages are expected to contain 50 per cent meat and the samples taken ranged from 51 to 78 per cent, with an average of 55.1. It is known that in some localities there is a much lower meat content in sausages, but it is satisfactory to report that comparable figures to those stated above have been reported for the County for a number of years.

Meat pies have at different times been the subject of speculation, and requests for some standard of meat content have been made by local authorities. To obtain some evidence of the standards which obtain locally, a number of pork pies were checked for meat content. Small pies in the price range of 7d.-10½d. had an average meat content of 30 per cent, which was considered a satisfactory amount. The actual range was between 22 and 41 per cent meat. In the absence of fixed standards, the discrimination of the purchaser must operate. One maker's attention was drawn to a rather low percentage of meat in his pies. It has since been increased. The next common size of pork pies in the price range of 1s. 6d.-1s. 9d. had meat contents between 33 and 43 per cent, with an average percentage of 37.6. These were also regarded as satisfactory.

Cheese. This County was one of twelve counties requested by the County Councils Association to take a number of samples of imported cheese to ascertain that its compositional standard was the same as was required by law in the country of manufacture. There had been some suggestions that inferior quality cheese was being exported from some cheese making countries to Great Britain. The result of the whole survey is not yet known, but all the samples taken within the County were up to the specified standards.

Fruit and Vegetables. 26 samples of potatoes, apples and tomatoes were examined for possible contamination by arsenical or other chemical sprays and all were satisfactory.

Ice-cream. All the samples were well above the prescribed standard for fat, milk solids and sugar. Those sold as dairy ice-cream were properly made with milk fat.

Advertisements. Foods which could quite properly be described as body-building and providing lots of energy have been advertised as being good for slimming. An advertisement for a cereal product stated, "Cut down on fattening starchy foods" . . . "It's the carbohydrate in most foods that puts on the pounds." The cereal food was found on analysis to consist mainly of carbohydrates, in fact 77 per cent, and the product provided 364 calories per 100 grams compared with 250 for bread, and between 80 and 100 calories for potatoes. Bread and potatoes are commonly thought to be starchy foods.

A new product on the market had reference on the container to slimming and reduction of fattening calories. The Public Analyst thought the reference was undesirable and the packers deleted it. The food consisted of a mixture of soya bean oil and lecithin and both foods have a high calorie value. The fattening property, however, as with all other foods, is in the amount consumed. The aerosol can was marked net weight 5 oz., but it was found that this quantity was made up of approximately $\frac{1}{4}$ oz. food and $4\frac{3}{4}$ oz. of chemical propellant derived from methane and ethane, which disappeared entirely on being released from the can. The label had also to be amended so as to show the ingredients in a proper manner and also to show the weight of the food to be $\frac{1}{4}$ oz. Having regard to this small amount of food in the tin, perhaps the reference to slimming and reduction of fattening calories was not altogether unjustified.

Several advertisements were considered to be misleading in other respects, and on the question being taken up with the advertisers, suitable modifications were made.

LEGAL PROCEEDINGS.

The proceedings taken during the year, with the results, are summarised below :

				<i>Fines</i>			<i>Costs</i>		
				£	s.	d.	£	s.	d.
1. Dairymen	...	Selling milk to which water had been added	Food and Drugs Act, 1955, Section 2	Dismissed					
2. Milk Producer	...	Having in possession for sale milk to which water had been added (1.1, 1.6, 4.1, 5.2, 6.2, 7.3, 7.5, 9.6 and 12.4 per cent.)	Food and Drugs Act, 1955, Section 32 (3)	5	0	0	12	12	0
3. do.	...	Having in possession for sale milk to which water had been added (4.1, 5.2, 5.8, 6.6, 6.9, 7.5 and 7.5 per cent.)	do.	5	0	0	11	16	0
				£10	0	0	£24	8	0

Total Fines and Costs — £34 8s. 0d.

SECTION F.

Prevalence of, and Control over, Infectious and other Diseases.

1. INFECTIOUS DISEASES.

Scarlet Fever. 234 cases of this infection were notified compared with 318 in 1959. 137 cases occurred in children between five and nine years of age.

Diphtheria. For the fourth year in succession no cases were notified.

Erysipelas. 24 cases occurred compared with 27 last year. 19 of the patients were aged forty-five years or over.

Typhoid. 2 cases were notified compared with no cases last year. Both occurred at St. Crispin Hospital, Duston.

Paratyphoid. 6 cases were notified compared with two cases last year.

Puerperal Pyrexia : Ophthalmia Neonatorum. These diseases are dealt with in the Maternity and Child Welfare Section of this report.

Pneumonia (Acute Primary and Acute Influenzal). 177 cases were notified compared with 204 last year.

Measles. There were 1,422 cases notified compared with 4,454 last year.

Whooping Cough. 167 cases were notified compared with 319 last year.

Meningococcal Infection. Five cases were notified compared with six last year.

Dysentery. 306 cases were notified compared with 208 last year. 192 of the cases occurred at Corby.

Food Poisoning. 38 cases occurred compared with 32 last year.

Poliomyelitis. No cases occurred compared with one paralytic case last year.

2. VACCINATION AND IMMUNISATION.

Diphtheria Immunisation.

The vaccine in general use is purified formol toxoid (FT), provided free by the Ministry of Health through the Public Health Laboratory Service.

The following table shows the number of children at 31st December, 1960, who had completed a course of immunisation against diphtheria at any time before that date (i.e., at any time since 1st January, 1946).

<i>Age on 31/12/1960 (i.e., born in year)</i>	<i>Under 1 1960</i>	<i>1-4 1956-1959</i>	<i>5-9 1951-1955</i>	<i>10-14 1946-1950</i>	<i>Under 15 Total</i>
A. Number of children whose last course (primary or booster) was completed in the period 1956-1960	1,643	13,312	11,460	2,025	28,440
B. Number of children whose last course (primary or booster) was completed in the period 1955 or earlier	—	—	4,132	13,676	17,808
C. Estimated mid-year child population	4,800	19,100	46,400		70,300
Estimated percentage immunised ...	63%		67%		

Whooping Cough Vaccination.

The whooping cough vaccine, the combined diphtheria-pertussis prophylactic, and the triple diphtheria-pertussis-tetanus antigen are purchased by the Council.

WHOOPIING COUGH VACCINATION STATISTICS FOR POPULATION UNDER 15 YEARS

<i>Year</i>	<i>No. Vaccinated during year</i>		<i>Total</i>
	<i>Under 5</i>	<i>5-14</i>	
1949	960 (766)	25 (16)	985 (782)
1950	1,476 (1,230)	41 (17)	1,517 (1,247)
1951	1,433 (1,231)	43 (19)	1,476 (1,250)
1952	1,897 (1,442)	73 (24)	1,970 (1,466)
1953	2,219 (1,887)	60 (36)	2,279 (1,923)
1954	2,919 (2,706)	107 (74)	3,026 (2,780)
1955	2,752 (2,656)	100 (74)	2,852 (2,730)
1956	3,097 (3,078)	83 (74)	3,180 (3,152)
1957	3,521 (3,492)	120 (102)	3,641 (3,604)
1958	2,962 (2,743)	58 (52)	3,020 (2,795)
1959	4,031 (3,701)	113 (103)	4,144 (3,804)
1960	4,460 (4,300)	204 (184)	4,664 (4,484)

The figures in brackets relate to children vaccinated with combined diphtheria-whooping cough vaccine or triple diphtheria-whooping cough-tetanus antigen and are also included in the diphtheria immunisation statistics.

Vaccination against Smallpox.

The number of vaccinations and re-vaccinations carried out since 1949 are :

<i>Age at date of vaccination</i>	<i>Under 1</i>		<i>1 to 4</i>		<i>5 to 14</i>		<i>15 or over</i>		<i>Total</i>	
	<i>Primary</i>	<i>Per cent Vacc'd.</i>	<i>Primary</i>	<i>Re-vacc.</i>	<i>Primary</i>	<i>Re-vacc.</i>	<i>Primary</i>	<i>Re-vacc.</i>	<i>Primary</i>	<i>Re-vacc.</i>
1949 ...	344	11	286	4	51	22	109	189	790	215
1950 ...	746	16	135	14	115	96	261	563	1,257	673
1951 ...	972	24	179	11	228	107	222	442	1,601	560
1952 ...	1,052	26	187	12	102	46	212	436	1,553	494
1953 ...	1,224	29	195	10	113	36	162	265	1,694	311
1954 ...	1,586	37	168	15	106	33	182	262	2,042	310
1955 ...	1,535	38	177	14	89	24	215	293	2,016	331
1956 ...	1,772	41	212	22	125	74	210	388	2,319	484
1957 ...	2,205	48	292	36	213	90	345	457	3,055	583
1958 ...	2,134	45	220	28	115	63	268	370	2,737	461
1959 ...	2,176	46	308	29	168	76	243	449	2,895	554
1960 ...	1,996	42	410	23	131	60	255	425	2,792	508

The number of vaccinations carried out by County Council Staff was 641.

That only 42% of all infants are vaccinated against smallpox cannot be regarded as satisfactory. Presumably most parents are apathetic on the subject, have some objection to vaccination procedures, or think that the risk of infection being imported into the country is so small that it can be neglected. With the increasing speed of air transport from eastern countries where the disease is endemic, a constant risk of the importation of a virulent and loathsome infection is ever present. Moreover, the disease may suddenly erupt in a community, and the infection begin to spread before there is time for protection by vaccination.

Poliomyelitis Vaccination.

The number of vaccinations carried out since 1956 are :

<i>Age</i>	<i>Under 5</i>	<i>5 to 9</i>	<i>10 to 14</i>	<i>15 or over</i>	<i>Total</i>	<i>Grand Total</i>
1956	409	688	—	—	1,097	99,471*
1957	1,114	4,769	1,374	—	7,257	
1958	11,667	10,407	13,348	4,775	40,197	
1959	5,131	2,758	2,844	16,079	26,812	
1960	3,957	632	628	18,891	24,108	

* Of this total 75,428 persons had received three injections.

CAMPAIGNS.

In Circular 3/60 dated 1st February, 1960, the Ministry of Health gave details of their policy to extend the offer of vaccination against poliomyelitis to further groups, including persons who had not reached the age of forty.

From 4th to 9th April “ Northants. Polio Week ” took place, during which 64 open clinics were held, involving the services of 66 Medical Officers and General Practitioners. Over 10,000 injections were given, the largest attendances recorded at single evening clinics being at Ketter-

ing (884), Rushden (678), Wellingborough (608) and Corby (512). Two doctors were at the larger clinics for second injections at Kettering, Wellingborough, Rushden and Corby.

Tribute is due to the doctors, nurses, clerks and voluntary workers who took part in the campaign. In some places the work was extremely heavy and the staff had to work long hours, but all took part with great goodwill and the public responded very well to the campaign.

A Mobile Vaccination Unit loaned by one of the pharmaceutical companies producing poliomyelitis vaccine visited the County from 15th to 19th November. A total of 1,101 persons attended for injections at Corby, Kettering, Wellingborough, Rushden, Daventry and Raunds. The Unit operated most efficiently and, having regard to the indifferent weather, the response from the public was reasonable. Northants. was the first Midlands County to use the Mobile Clinic and a short film of the work at Corby was shown on the B.B.C. Midland News.

Sterilization of Syringes and Needles.

In the "Monthly Bulletin of the Ministry of Health and the Public Health Laboratory Service", February 1960, it was stated that a Working Party of the Medical Research Council would report on the desirability of using a separate sterile syringe and needle for each injection because of the risk of transferring infection. Accordingly medical, nursing and health visiting staff were instructed in January 1961 to use a freshly sterilized syringe and needle for each injection.

Yellow Fever Vaccination.

The Ministry of Health decided to set up forty yellow fever vaccination centres throughout England and Wales and accepted the County Council's offer to provide a centre in Northampton.

The new service started on 1st July, 1960, and from the first vaccination on 21st July to 31st December, 1960, 53 persons were vaccinated. A fee of one guinea is charged for the vaccination.

3. TUBERCULOSIS.

The numbers of cases of tuberculosis on the registers at the end of 1960 were :

<i>Respiratory.</i>			<i>Non-Respiratory</i>			<i>Total</i>
<i>Males.</i>	<i>Females.</i>	<i>Total.</i>	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>	<i>Cases.</i>
695	568	1,263	162	174	336	1,599

Particulars of new cases of tuberculosis and of all deaths from the disease are :

AGE PERIODS.	NEW CASES.				DEATHS.			
	<i>Respiratory.</i>		<i>Non-Respiratory.</i>		<i>Respiratory.</i>		<i>Non-Respiratory.</i>	
	M.	F.	M.	F.	M.	F.	M.	F.
0—	—	—	1	—	—	—	1	—
1—	—	—	—	—	—	—	—	—
2—	—	1	—	1	—	—	—	—
5—	1	2	1	2	—	—	—	—
10—	—	—	—	—	—	—	—	—
15—	6	4	—	1	—	—	—	—
20—	6	7	—	1	—	—	—	—
25—	6	15	3	4	—	—	—	1
35—	12	4	2	1	—	—	—	—
45—	8	2	2	—	4	—	—	—
55—	10	2	—	2	3	1	1	—
65—	6	2	1	2	3	2	—	—
75—	1	—	—	—	3	2	—	—
TOTALS ...	56	39	10	14	10	3	2	1

Thirty-one new cases were not notified in this Administrative County, being transfers from other areas. There were four posthumous notifications.

The total primary notifications of tuberculosis amounted to 119—87 of which occurred in the Urban Districts and 32 in the Rural Districts. Of this number, 95 were suffering from respiratory forms of the disease and 24 from other forms of tuberculosis. There were three fewer primary notifications during 1960 than in 1959. Table III, page 67, in the statistical section, shows the number of cases notified in each District.

Mortality. Respiratory—13 deaths (10 males and 3 females) occurred, 10 in the Urban Districts and 3 in the Rural Districts.

Other forms—3 deaths (2 males and 1 female) occurred.

There were thus 16 deaths from all forms of tuberculosis, the lowest recorded. The mortality rate was 0.05 per thousand of the population, which is the lowest recorded. The rate for the combined Urban Districts was 0.06 and 0.02 for the combined Rural Districts.

The annual Tuberculosis Mortality Rates from the beginning of this century will be found in Table V, page 69.

Mass Radiography.

Details of surveys carried out in the county by the Mass Radiography Service (No. 1 Unit, Oxford Regional Hospital Board) are :

<i>Period of Survey.</i>	<i>Place Surveyed.</i>	<i>Groups Surveyed.</i>	<i>Number X-rayed.</i>	<i>No. of newly discovered cases of significant tuberculosis.</i>		<i>Percentage Response.</i>
				<i>Active.</i>	<i>Rate per 1,000.</i>	
15th Dec., 1959	BURTON LATIMER	Firm	495	—	—	99
30th Dec., 1959	IRTHLINGBOROUGH (6th Survey)	Boot and Shoe	525	—	1.11	84
		Other firms	906	1		
11th-15th Jan., 1960		General Public	626	—	0.49	
		TOTAL	2,057	1		
4th-7th Jan.	RAUNDS (4th Survey)	Boot and Shoe	797	—	1.71	82
		Other firms	452	—		
		General Public	585	1	0.55	
		TOTAL	1,834	1		
18th-21st Jan.	HIGHAM FERRERS (6th Survey)	Boot and Shoe	537	1	1.86	88
		Other firms	808	—		
26th-29th Feb.		General Public	526	—	0.53	
		TOTAL	1,871	1		
25th Jan.- 25th Feb.	RUSHDEN (6th Survey)	Boot and Shoe	4,097	4	0.98	86
		Other firms	1,269	1		
		General Public	2,712	—	0.62	86
		TOTAL	8,078	5		
26th-27th Jan.	IRCHESTER (6th survey)	Boot and Shoe	162	—		86
		Other firms	286	—		
		General Public	315	—		
		TOTAL	763	—		
19th Feb.	TIFFIELD (St. John's School)	Boys	18	—		
1st March	CORBY	Firm	125	—		100
2nd March	WELLINGBOROUGH	Firm	546	—		92

Period of Survey.	Place Surveyed.	Groups surveyed.	Number X-rayed.	No. of newly discovered cases of significant tuberculosis.		Percentage Response.
				Active.	Rate per 1,000.	
14th-18th March	DUSTON (St. Crispin Hospital) (6th Survey)	Patients	949	2	2.11	
		Staff	253	—		
		TOTAL	1,202	2	1.66	
24th-31st March	TOWCESTER R.D. (1st Survey)	General Public	864	—		
1st-5th April	ROADE (2nd Survey)	Firm	1,049	—		63
		General Public	186	—		
		TOTAL	1,235	—		
7th-20th April	TOWCESTER (4th Survey)	Firms	1,068	—		87
		General Public	317	—		
		TOTAL	1,385	—		
25th April-30th May	CORBY (6th Survey)	Firm	11,059	12	1.09	97
2nd June	DAVENTRY	Firm	164	—		—
20th-23rd June	KETTERING R.D. (2nd Survey)	General Public	851	2	2.35	
Jan.-June	WELLINGBOROUGH (monthly service)	General Practitioner Referrals	29	—		
		School Children	9	—		
		Firms	33	—		
		General Public	4	—		
		TOTAL	75	—		
24th June-22nd July	CORBY (7th Survey)	Boot and Shoe	147	—	—	86
		Other firms	1,531	3	1.96	
		General Public	2,155	—		
		TOTAL	3,833	3	0.78	
7th July	WELLINGBOROUGH	Firm	237	—		90
8th July	WELLINGBOROUGH (Park Hospital)	Patients	83	—		
20th July	CORBY	Firm	146	1	6.85	—
25th July	APETHORPE (St. John's School)	Boys	62	—		
		Staff	24	—		
		TOTAL	86	—		
27th July	Oundle (Glaphorn Rd. Hospital)	Patients	120	—		
		Staff	35	—		
		TOTAL	155	—		
19th-29th Sept.	NORTHAMPTON R.D. (1st Survey)	General Public	1,026	—		
27th Oct.	DESBOROUGH	Firm	292	1	3.43	92
July-Dec.	WELLINGBOROUGH (monthly service)	General Practitioner Referrals	36	—		
		Contacts	51	—		
		Firms	6	—		
		General Public	5	—		
		TOTAL	98	—		

In total, therefore, the Mass Radiography Service examined some 38,578 persons and ascertained 29 newly-discovered active cases of significant tuberculosis, a rate of 0.75 per thousand.

A reference to the incidence of newly-discovered cases in the Boot and Shoe Industry compared with other occupations is made in the introductory letter.

Mantoux Tests.

The results of the initial Mantoux Tests carried out on contacts up to 15 years of age of pulmonary tuberculosis cases diagnosed in 1960 are :

<i>Age Groups</i>	<i>Pos.</i>	<i>Neg.</i>
0-4	3	20
5-9	10	14
10-15	12	9

B.C.G. Vaccination of school children.

Consent for Heaf testing and vaccination was given in respect of 2,774 children, which represents an acceptance rate of 93%. 623 children tested were Heaf positive, a rate of 25.2%. The number of vaccinated was 1,936 and the number of sessions devoted to this by medical officers was 120.

In accordance with the recommendations of the Tuberculosis Vaccines Clinical Trials Committee of the Medical Research Council, positive reactors to the tuberculin test were offered chest X-ray examinations.

Of 873 children examined at the No. 1 Unit of the Oxford Regional Hospital Board Mass Radiography Service, nine were referred to the Chest Clinic with the following results:

	<i>Male</i>	<i>Female</i>	<i>Total</i>
Pulmonary tuberculosis requiring treatment or close supervision (<i>These were newly discovered cases ; one had a positive sputum.</i>)	2	—	2
Presumably inactive pulmonary tuberculosis but requiring occasional supervision	1	3	4
Healed primary tuberculosis	1	—	1
Pneumonitis	1	—	1
Bronchiectasis	1	—	1

Re-housing of Cases of Tuberculosis.

The District Medical Officers of Health have kindly supplied the following information regarding the numbers of houses allocated to tuberculous families.

<i>District</i>	<i>No. of Houses Allocated</i>
Burton Latimer Urban	1
Corby Urban	5
Irthlingborough Urban	2
Wellingborough Urban	1
Daventry Rural	2

Contacts.

The following table shows the number of contacts examined and the number of contacts successfully vaccinated with B.C.G.

<i>Year</i>	<i>Contacts examined</i>	<i>Contacts vaccinated with B.C.G.</i>
1949	463	Nil
1950	774	12
1951	874	93
1952	1,002	118
1953	1,042	121
1954	1,074	182
1955	1,002	338
1956	1,045	413
1957	1,082	480
1958	997	465
1959	926	431
1960	871	518

Of 216 contacts of pulmonary tuberculosis cases diagnosed in 1960, 212 or 98% were examined. Three contacts were diagnosed as cases of pulmonary tuberculosis.

Extra Nourishment Grants.

Grants of free milk varying from one to three pints per day were made to 19 patients, most of whom lived in areas not covered by Voluntary Care Committees. Grants are invariably given on the recommendation of the Chest Physician without regard to the family income.

Care and Prevention.

In the following report, the Consultant Chest Physician for the County, Dr. G. B. Lord, describes his work on behalf of the County Council and expresses his views on the future programme.

“ The essential factor in the prevention and control of tuberculosis is the diagnosis, treatment and supervision of the sputum positive case of respiratory tuberculosis. Prevention and treatment therefore, are kindred services and it is desirable that the medical team responsible should care for the patient both in the Sanatorium and at home working in consultation with the General Practitioner.

We present figures with regard to contacts and new cases of respiratory tuberculosis.

Annual Statistics

1. New cases of respiratory tuberculosis diagnosed 85, 28 negative sputum cases.
57 positive sputum cases.
2. Number of cases with positive sputum not in institution at time
of examination 44
3. Number of contacts examined as first examinations 831
4. Number of contacts diagnosed as respiratory tuberculosis amongst
first examinations 3
5. Pick-up rate for contacts diagnosed as respiratory tuberculosis ... 3.61 per 1,000
6. (a) Number of B.C.G. vaccinations of contacts 477
6. (b) Number of above contacts vaccinated with B.C.G. 2 months old or
younger 147
7. Mass Radiography (a) Total number of miniatures taken in the
area 49,569
- (b) Number of active cases of respiratory
tuberculosis diagnosed 23
- (c) Pick-up rate of active cases per 1,000
miniatures 0.5

8.	Number of expectant mothers X-rayed by Clinic Service	...	195
9.	Number of expectant mothers diagnosed as active respiratory tuberculosis	... ..	2
10.	Number of mothers diagnosed as active respiratory tuberculosis within six months of confinement	... ..	2
11.	Special Surveys.		

Some special surveys were made amongst school or work communities which had been exposed to tuberculous infection.

By Mass X-ray :

March, Wellingborough Firm.	Miniatures	... ..	541
	Active Resp. Tub.	... ..	Nil
October, Desborough Firm.	Miniatures	... ..	292
	Active Resp. Tub.	... ..	1

By Clinic Service :

Kettering Junior and Senior Training Centre			
	Number examined	... ..	20
	Active Resp. Tub.	... ..	Nil

The Results of Preventive Measures against Tuberculosis

It is now well accepted even by the general public, that tuberculosis in all its manifestations, and respiratory tuberculosis, which has deeply concerned our department, is a much less serious disease than 20 or even 10 years ago. This improvement has been attributed to the use of the drugs Streptomycin, P.A.S. and I.N.H., but chemotherapy has only contributed to the changed pattern of tuberculosis. Streptomycin was first used in this area in 1947 and 1948, and the death rate from respiratory tuberculosis was already falling. The number of deaths from respiratory tuberculosis as reported by the County Medical Officer of Health in 1930 was 150, in 1947 was 69, and in 1948, 87. Our results are due to preventive measures which have been in action since the late 1920's and 1930's, and would include the segregation of active sputum positive cases of respiratory tuberculosis, and the care of their contacts and the general measures of a Public Health Programme and a Community Service.

Certain features of our clinic work and of our annual returns reveal the value of preventive measures.

1. *Deaths from Respiratory tuberculosis*

1930	1960
150	13

There were no deaths in 1960 from Respiratory Tuberculosis under 45 years of age. This is a most valuable result in respect of a disease which notably used to cause death amongst our young people.

2. *Type of Disease.* Our effort always is to diagnose respiratory tuberculosis as early in time as possible and, of 85 patients diagnosed as respiratory tuberculosis, one half were found to be early closed non-infectious cases amenable to treatment. 76 patients were discharged from Rushden House Sanatorium with respiratory tuberculosis quiescent as a result of treatment, and 21 were discharged with respiratory tuberculosis non-quiescent, but, of these 12 were transferred to Creaton Hospital and Peppard Chest Hospital for continuation of treatment. This leaves 9 patients discharged home with disease non-quiescent and these patients are of a group whose disease is of very long standing and difficult to arrest and who are admitted for periodic treatments and assessment.

3. *Contacts.* Of the contacts diagnosed as respiratory tuberculosis, 2 were contacts (age 8 years and 5 years) of their father recently diagnosed as respiratory tuberculosis. Both these children's disease is now quiescent. The third contact diagnosed as respiratory tuberculosis was an 18 years old daughter of a patient who has been on our clinic register since 1933, and whose disease

is chronic and impossible to arrest. This girl has been under our care and observation since 1942, and in February during routine clinic supervision, presented for the first time evidence of a small active tuberculosis focus in her lung—sputum positive. Her disease was quiescent by September. This paragraph therefore, reveals the overwhelming importance of the examination of new contacts and the care of old unvaccinated contacts.

4. *Mass Radiography.* Mass Radiography is probably the most effective single weapon ever used in the control of respiratory tuberculosis.

1960 pick-up rate of active respiratory tuberculosis amongst 49,000 subjects, general public and factory workers was 0.5 per 1,000 (approx.).

Although this figure is not comparable with the first results of the Mass Radiography Unit in 1947 when we were examining factory workers only, it does suggest a remarkable reduction in incidence of the disease.

This reduction in incidence may be reflected in our clinic figures which show decline in numbers, a decline which is not consecutive every year.

Future Programme. The following routines must continue with undiminished fervour.

1. The search for new active cases of respiratory tuberculosis by the clinic service and by Mass Radiography and the reduction of these patients' disease to quiescence.

2. The care of chronic respiratory tuberculosis disease in those patients who have carried the disease in non-quiescent form from the 1930's and 1940's, and the supervision of their contacts. The Care Committees and Health Visitors in the area are doing valuable work in the home environment in this group of patients.

3. There must be especial care with those patients whose tubercle bacilli organisms are resistant to the modern drugs, and the supervision of these patients at home and in the community must be close.

G. B. LORD."

Domiciliary Occupational Therapy.

Reference is made on page 61 to the work with patients suffering from chest conditions.

4. VENEREAL DISEASES.

The number of County patients attending for the first time at venereal diseases clinics were :

	<i>Syphilis</i>	<i>Gonorrhoea</i>	<i>Other Conditions</i>
Northampton General Hospital	3	19	35
St. Mary's Hospital, Kettering	2	10	47
Peterborough Memorial Hospital	—	1	6
Total	5	30	88

SECTION G.

Health Education

The place of health education in the work of a Health Department.

It would be no exaggeration to say that teaching the public about health is one of the most important functions of preventive medicine. This view is shared by all sections of the staff of the County Health Department. It is further demonstrated by the support local authorities, including Northamptonshire County Council, give to the Central Council for Health Education ; by the fact that the British Medical Association has decided that practitioners in all branches of medicine should make an especial study of health education during 1961 ; and by the recent decision of the Ministry of Health to set up a Committee of the Central Health Services Council, under the Chairmanship of Lord Cohen of Birkenhead, to report on the health educational facilities of the country.

The changing emphasis in public health.

All members of the staff of the County Health Department are already playing their parts in the work of health education and it is clear that this work must expand if we are to fulfil our role in preventive medicine. The need for this expansion stems from a changing emphasis in public health work. Examples of this are to be found in many fields, for example :

(a) *Antenatal Clinics.* Throughout the present century there has been a steady improvement in antenatal care. Whilst all aspects of this remain important, many of the former hazards of child-birth have been successfully overcome, and increasing attention is now being paid by local health authorities to educational and psychological aspects. Relaxation classes and their accompanying periods of health education are proving most popular in Northamptonshire, and serve a valuable purpose in preventive medicine. The recent Report on the Confidential Enquiry into Maternal Deaths 1955-57 stresses the value of health education in the prevention of unnecessary mortality.

(b) *Child welfare.* The same tendencies are to be seen here. The days of gross physical disease are largely over, and child welfare clinics are coming to be regarded more as places for considering the developmental, psychological and emotional problems of childhood, rather than for the discovery of gross physical disease. Health education is already becoming a major activity and it is hoped shortly to commence a regular series of displays in the main clinics throughout the County. Discussion groups, mothers' clubs and fathers' clubs are likewise desirable developments in this field of health education, and such facilities are steadily expanding.

(c) *School children.* The same type of change is again to be found in work amongst school children, and this County has already abolished unnecessary routine weighing at schools. An increasing part of the School Medical Officers' time is taken up in discussing problems with parents and trying to educate them in the avoidance of mental as well as physical ill-health. Health visitors are taking an increasing part in purely health educational activities among children by means of lectures, discussions, film strips and demonstrations. Parent-teacher associations are also displaying an interest in these matters. The County's first attempt at the production of its own health educational film strip is likewise under way, the subject being the urgent problem of smoker's cancer of the lung which is now killing over 20,000 people every year in England and Wales.

(d) *Other.* There is a constantly rising demand from various groups of the public for lectures, brains trusts, film shows and demonstrations dealing with health subjects. Recently

a substantial number of these have been concerned with problems of mental health. Medical officers, health visitors and nurses all take part in this work.

Future Aims.

The prevention of disease is always the primary object of the public health service. A high, although not sufficiently high, level of prevention has already been achieved in the field of immunisation against such diseases as diphtheria, whooping cough and, more recently, poliomyelitis. Environmental measures to prevent diseases associated with bad housing, unhygienic food, infected milk and atmospheric pollution have likewise progressed steadily and their effects are being reflected in the rising standard of health of the population.

Just as immunisation and environmental control have in large measure prevented certain diseases, so health education can prevent others. It must be especially directed towards those diseases in which the way of life of the potential victim must be modified in order to achieve prevention. This approach applies to such diverse diseases as, for example, cancer of the lung and of certain other organs; dental caries; certain kinds of cardio-vascular disease; some part of diabetes; and, perhaps above all, to mental health, in the widest meaning of that term. It is by an attack on non-infectious diseases that most can be done to reduce death and ill-health in the present-day community, and it is therefore in that direction that the future of public health and preventive medicine lies.

Thus the role of the local health authority is changing. It is continuing its traditional pursuit of prevention, but is tackling it by new methods. Medical needs are never static and the time has come to take further steps to develop health education throughout every field of work of the County Health Department. Interest amongst all members of the staff is high and a successful two-day course on health education organised by the Central Council for Health Education was held in March. Maintaining interest of this kind is of the greatest value in attracting and retaining health visiting and nursing staff, and for that reason, an early development of the Council's health education service is again desirable.

Future developments in Northamptonshire.

An increasing number of local authorities have already entered the field of health education on an organised scale, and many have appointed suitably qualified organisers.

There is need for this because, whilst Health Visitors' courses of training pay a variable amount of attention to the subject of health education, this forms only one small part of their studies. Much of their instruction concerns health education by individual approach in the course of home visits rather than by wider group methods. District nurses and midwives who are not trained health visitors have, of course, received no instruction in the subject of health education. Refresher courses and even special study days run by the Central Council for Health Education can go only a short way towards providing supplementary instruction in the technique of health education.

In the past, the formal lecture has served a useful purpose. With modern methods of publicity, particularly in the fields of television and popular advertising, an appeal to the public on a health subject now demands much more than a straightforward talk or the distribution of a few pamphlets which are promptly lost or chewed by the baby. A very few gifted orators can put over an idea purely by their eloquence, but for the majority, modern visual aids and other special techniques of health education are imperative.

The time has thus come to consider the appointment of a specially trained member of the staff who will be responsible for the co-ordination and expansion of the health education activities of the County Health Department. This work would include :

- (a) The co-ordination, under medical supervision, of a comprehensive health education programme in each of the services for which the County Health Department is responsible.
- (b) The arrangement of in-service training in the latest methods of health education for all staff of the Department.

- (c) The preparation of much of the necessary visual aid material. (At present, the limited amount of this work which is undertaken has to be carried out in the evenings by health visitors, nurses and midwives.)
- (d) The giving of lectures and arranging of demonstrations for the many and varied groups of the public who request these.
- (e) Assisting individual health visitors, nurses and midwives with the preparation of subjects and material for their own health education activities.

In the light of the considerations which have been summarised here, it is gratifying to report that, towards the end of 1960, the Health Committee decided that a member of the nursing staff should be given special responsibility for co-ordinating and developing the health educational activities of the County Health Department. In the light of the altering needs of the public health service, it was deemed appropriate that one of the Assistant Superintendent Nursing Officers should be appointed Health Education Organiser.

It was further decided that, in order the better to fit the occupant of the post for her task, she should be given the opportunity of attending the London University course leading to the Diploma in Content and Methods of Health Education. During this period she would receive her full salary as well as fees and expenses.

It is hoped to make the appointment early in 1961 and thereby to take the first step towards expanding the invaluable work of health education throughout every branch of the Department. It might be added that there is considerable enthusiasm amongst members of the staff for the assistance which the proposed Health Education Organiser will be able to give them in developing their techniques of teaching.

SECTION H.

Mental Health Services.

1. ADMINISTRATION.

(i) Committee responsible for service.

The Committee responsible for the service is the Mental Health Services Sub-Committee of the Health Committee. The Sub-Committee consists of thirteen members of the Council and five co-opted members—two nominated by the Northamptonshire Local Medical Committee, one by the Northampton Mental Hospitals Management Committee, and two appointed by the Health Committee. Meetings are held quarterly.

(ii) Co-ordination with the Regional Hospital Board and Hospitals.

The County Medical Officer of Health is a member of the Northampton and District, and of the Kettering and District Hospital Management Committees; the Deputy County Medical Officer of Health is a member of the St. Crispin Hospital Management Committee and the Bromham Hospital House Committee. Further liaison with the hospital services is obtained through the Physician Superintendent and the Consultant Psychiatrists of St. Crispin Hospital, who have always given their help and advice when consulted. A close link is maintained with hospitals for the subnormal and severely subnormal, and Mental Welfare Officers supply social reports where these are required by the hospital staff. They also provide supervision for patients from these hospitals who are at home on leave.

With the expansion of the staff of Mental Welfare Officers, the amount of social work carried out on behalf of the staff of St. Crispin Hospital has been increased and it is anticipated that this expansion will continue. An interesting innovation has been the arrangement, commenced during 1960, whereby nurses from St. Crispin Hospital have paid visits with Mental Welfare Officers in order to gain experience of community care for the mentally disordered. These nurses have also accompanied members of the County nursing service in order to observe their professional work.

(iii) Duties delegated to Voluntary Associations.

No duties have been delegated to Voluntary Associations, but use is made of holiday homes supervised by the Guardianship Society, Hove.

(iv) Training of Staff.

The Supervisor of the Kettering Adult Training Centre holds the Diploma for Teachers of the Mentally Handicapped, as do the Supervisors of the Kettering and Wellingborough Junior Training Centres. A further member of the staff commenced the Course in October and it is the policy of the Mental Health Services Sub-Committee that others should be seconded in future years.

2. DOMICILIARY SUPERVISION.

During the whole of 1960, Health Visitors paid 827 routine quarterly calls on subnormal patients under statutory and voluntary supervision in their homes. Mental Welfare Officers visited in other cases, including those where there were special difficulties or where particular social or other problems had to be solved.

Hospital Care.

Of 17 patients who were admitted to hospital, 12 were placed there informally. Four Orders were made upon Petition and one by the Court.

A total of 11 patients were admitted to hospital for temporary periods, usually in order to provide a much-needed break for their parents.

3. ACCOUNT OF WORK UNDERTAKEN IN THE COMMUNITY UP TO 31st OCTOBER, 1960.

Lunacy and Mental Treatment Acts, 1890-1930.

These Acts were repealed with the coming into full operation of the Mental Health Act, 1959, on 1st November, 1960. The following statistics accordingly apply only to the first ten months of the year.

Cases dealt with by Duly Authorised Officers :

	<i>Males</i>	<i>Females</i>	<i>Total</i>
No. of cases certified and removed to hospital	4	8	12
No. of cases removed on Three Day Orders and subsequently			
(a) admitted as Certified Patients	1	5	6
(b) admitted informally	37	51	88
(c) discharged (5 after extension by Physician Superintendent)	4	4	8
(d) died	3	2	5
(e) pending	—	4	4
No. of cases removed on Urgency Orders (7 days) and subsequently discharged	—	1	1
No. of cases removed on Justices' Orders (14 days) and subsequently			
(a) admitted as Certified Patients	—	3	3
(b) admitted informally	6	14	20
(c) discharged (1 after extension by Physician Superintendent)	1	2	3
(d) died	—	1	1
(e) pending	1	—	1
No. of patients admitted direct as Voluntary Patients	1	1	2
No. of cases admitted direct as Informal Patients	27	38	65
No. of cases in which no action was necessary	35	59	94
Total number of cases referred	120	193	313

The number of admissions from the County to Mental Hospitals as Health Service patients were as follows :

	<i>Males</i>	<i>Females</i>	<i>Total</i>
Certified Patients	5	16	21
Temporary Patients	—	—	0
Under Orders for Observation	52	79	131
Voluntary Patients	1	6	7
Informal Patients	133	186	319
	191	287	478

Mental Deficiency Acts, 1913-38.

These Acts also were repealed by the Mental Health Act, 1959, on 1st November, 1960, and the following figures relate only to the first ten months of the year.

Cases on the Register :

	<i>Males</i>	<i>Females</i>	<i>Total</i>
Under Hospital Care	183	141	324
On Licence	4	9	13
In Place of Safety	1	—	1
Under Guardianship	1	—	1
Under Statutory Supervision	114	126	240
Under Voluntary Supervision	94	91	185
Ascertained but not under supervision	4	1	5
Total number of cases on Register.....	401	368	769

Ascertainment.

Fifty-one new cases were ascertained. Of the 25 reported by the Education Authority, 13 were excluded from school as ineducable and 12 were in need of supervision after leaving school. Seven cases were reported by hospital consultants and general practitioners, six were transfers from other local authorities, five were reported by parents, two by the Children's Officer, and one each by the police, the employer, and by the Court. The remaining three were ascertained directly by the Health Department. The names of 30 cases were removed from the Register : nine were no longer in need of supervision, six died, twelve removed from the area, and three were discharged from their Orders by the Board of Control.

Guardianship.

Visits were paid to three patients who were under Guardianship, two of whom were the responsibility of other authorities. One of these patients died in hospital.

Licence.

Nineteen patients, including 15 new cases, were on licence from hospital. Five returned to hospital, having proved unsatisfactory in the community, and three were discharged from licence. One of the latter subsequently accepted voluntary supervision.

4. MENTAL HEALTH ACT, 1959.

The following statistics apply to the last two months of the year during which the provisions of the new Mental Health Act were in operation. The consequential changes in nomenclature will be seen, the mentally disordered being divided into subnormal and severely subnormal, mentally ill and psychopathic.

1. Number of patients notified to County Health Department :	
(a) Subnormal and severely subnormal	21
(b) Mentally ill and psychopathic.....	64
	<hr/>
	85
	<hr/>
2. Action taken :	
Placed under domiciliary supervision or care	21
Admitted to hospital :	
(a) informally	19
(b) under Section 25 (observation)	19
(c) under Section 26 (treatment)	9
(d) under Section 29 (emergency)	4
(e) under Section 60 (Court Order)	1
(f) Short-term care	1
Action pending or official action unnecessary	11
	<hr/>
	85
	<hr/>
3. Patients on leave from hospital	—
Patients discharged from hospital care	73
Patients discharged from supervision or care	10
Died or removed from area	15
 Total number of admissions (<i>including those not dealt with by the County Health Department</i>) :	
(a) for treatment	9
(b) for observation	23
(c) informally	79
	<hr/>
	111
	<hr/>

Mental Welfare Officers.

The first two new appointments of Mental Welfare Officers were made, the officers being Miss E. M. Bliss, S.R.N., who took up duty on 10th November, and Mr. K. Greenwood, S.R.N., R.M.N., who will commence in February, 1961. With the increasing emphasis on community care for the mentally disordered, the work of the Mental Welfare Officers will, for several years, expand in many directions, and to meet this it will be remembered that the proposals for implementing the Mental Health Act, which were approved in principle by the County Council in November 1959, envisage an augmentation in the number of Mental Welfare Officers from three to eight. As these officers should not spend unnecessary time on clerical work, a second clerk was appointed to the mental welfare section.

Voluntary Bodies.

Much help has been given by the various branches of the National Society for Mentally Handicapped Children and particularly by the Kettering and District Society. Further details of these activities are mentioned under the reports from the Supervisors of individual Centres.

5. WAITING LIST.

At the end of the year the waiting list for admission to hospitals for the subnormal and severely subnormal was :

	<i>Males</i>	<i>Females</i>	<i>Total</i>
Urgent	8	4	12
Non-urgent.....	10	7	17
<hr/>			
Total awaiting hospital care	18	11	29

Whilst some of the non-urgent cases are on the waiting list purely with a view to ensuring a place when the relatives are no longer able to give them adequate care, it is unsatisfactory to find that 12 urgent cases are still awaiting hospital admission. This is not due to lack of co-operation from the hospital authorities, but arises from the national shortage of beds. A new hospital for subnormal patients is to be built near Northampton, at Upton, and will be of the greatest value in providing facilities for those who cannot be adequately looked after at home.

6. TRAINING CENTRES.

The work of the Adult and Junior Training Centres has grown, the total numbers on the rolls at the end of the year being 128 compared with 105 in 1959. The staff has accordingly been increased from two to three at the Kettering Junior Training Centre and from one to two at the Adult Training Centre.

Accommodation at the Training Centres is rapidly proving quite inadequate and there will be no solution of this difficulty until new Centres become available. The position of the Adult Training Centre has become particularly acute, although some measure of relief has been obtained by extending the previous work to include gardening. For this the trainees have assumed responsibility for the garden at Stockburn Memorial Home, where they have also acquired a room both for use in bad weather and as a club and hobbies centre.

During 1960 a suitable site was found in Kettering for the new Junior Training Centre, Adult Training Centre and Boarding House for severely subnormal adults. In Wellingborough, negotiations for a site for a Junior Training Centre and associated Boarding House proved difficult and had to be continued into 1961.

The work of the Junior Training Centres was affected by two important policy decisions. Firstly, the Committee, after increasing their transport facilities, decided that in 1961 all children living within a reasonable distance would be taken to and from the Centres. The second important matter was that attendance at Training Centres became compulsory under the Mental Health Act, 1959. Children unsuitable for education at school were thus put on the same basis as handicapped schoolchildren, attendance normally being compulsory at Training Centres from the age of five to 16 years. This was a wise decision because, from a mistaken sense of kindness,

a few parents have always been opposed to allowing their severely subnormal children to associate with others or to receive training. As was explained in the 1959 report, once parents have been persuaded to allow their children to attend a Centre, they are soon convinced of the value of the training. The provisions of the Mental Health Act enable the remaining minority of parents to be persuaded to allow their children to attend and it is hoped that in no case will it prove necessary to resort to legal action.

The following reports have been compiled from notes received from the Supervisors of the five Training Centres.

Corby—Rockingham Road Health Clinic.

(Supervisor—Mrs. E. E. Cocker. Assistant Supervisor—Mrs. W. M. Baxter.)

In January, 1960, there were 17 children attending the Training Centre in Corby, their ages ranging from five years to 15 years. By December of the same year this number had increased to 27, their ages being within the same range, with the exception of one girl of 24 years.

All children were transported from home to the Centre each day by the ambulance service. This involved two journeys, the Oundle and district children being first to arrive, after which the Corby children were brought by the same vehicle. This procedure was repeated in reverse each evening. The appointment of an escort during the Autumn Term was a great improvement, as previously the escapades of the children while travelling on the longer route had been the cause of some concern.

The Open Day was held on Thursday, 21st July. This was well attended by parents and friends, all of whom appreciated the opportunity of seeing the year's handwork, and of buying some of it.

There were no absentees on Tuesday, 21st June, when children from the Centre met the other children from Kettering, Wellingborough and Northampton Centres in Wicksteed Park, Kettering. The ride on the miniature railway caused great excitement, and the ducks were enthusiastically fed with the remains of the lunch.

The Rector of Corby, the Rev. A. Brooke Westcott, gave a party for the children attending the Centre on Wednesday, 20th July, when a party of Grammar School boys assisted with the games and activities.

The children gave a Christmas Concert and Party for parents and friends on Wednesday, 14th December. The percussion band, action songs and Nativity Play were followed by a visit from Father Christmas, and each child received a gift which had been provided by the Corby and District Society for Mentally Handicapped Children.

Mr. C. W. Furniss once again brought a party of boys from Corby County Modern School on Friday, 16th December. These visitors gave each child a Christmas card, present and sweets, and then provided an entertainment with magic and accordions.

Mrs. A. McLellan, Chairman of the Corby branch of the National Association of Ladies' Circles, visited the Centre on Tuesday, 20th December, with some of the members, and presented a doll's pram, doll and tricycle.

On Tuesday afternoons, when the premises are required for a Child Welfare Centre, the children continue to go to St. Columba's Church Hall. Whenever the weather permitted, the opportunity was taken of spending the afternoon in question in the fresh air, and the children enjoyed a walk, or playing in the recreation grounds.

Wellingborough—Salem Hall, Salem Lane.

(Acting Supervisor until September—Miss H. E. Griffin. Supervisor from September—Miss B. V. Miller. Assistant Supervisor—Mrs. N. E. Coles.)

The number of children attending the Centre throughout the year was 25.

The curriculum of this Centre continued as in previous years, Miss Griffin being in charge whilst the Supervisor was attending the National Association for Mental Health Diploma Course

in London from September 1959 to July 1960. The Centre continued to cater for severely sub-normal children in the Higham Ferrers, Irthlingborough, Rushden, Earls Barton and Wellingborough areas, the children travelling by public transport and being met by the staff of the Centre.

In addition to the normal work of the Centre, it proved possible to obtain some factory out-work in the form of hair-slide assembly, this work being undertaken by pupils over the age of 15 years.

In January a boy who had attended the Centre for four years had made sufficient progress to be given a place at a special school for dually handicapped children. He was severely deaf and had physical as well as mental handicaps, but a successful placement proved possible in his case.

Outings for the children were arranged during the year and these included a day at Skegness and also Wicksteed Park. An instructional visit to Wellingborough Zoo also took place and proved very popular with the children. An Open Day was held at the Centre in December.

Northampton—St. Giles' Church Buildings, Northampton.

(Supervisor—Mrs. M. B. Redley. Assistant Supervisor—Mrs. D. P. Stamford.)

The number of children attending the Centre at the beginning of the year was 18, 17 coming daily and one younger child on three days each week. By the end of the year there had been an increase in the number attending to 27, whose ages ranged from six to 23.

The usual daily activities were continued, most of the children now being fully familiar with the routine of the Centre. During the summer term advantage was taken of fine days to take the children into Beckett's Park for games and physical education, as well as for nature walks.

Various social activities took place throughout the year. On 21st June there was a trip to Wicksteed Park to join the children from the other Centres. On 1st July the children, accompanied by some of their parents, spent an enjoyable day at Hunstanton.

At the beginning of November with the provision of special transport it was possible to take in five more children from the Daventry area.

The Open Day was held on 24th November when a good display of handwork was arranged and the children performed a short play with a number of songs. About 50 parents and friends attended. The Sale of Work included embroidery, canework, stools, leather work, lampshades and rugs. The winter term ended happily on 21st December with a party, Christmas tree and presents for all the children.

Despite the marked increase in numbers of children, this Centre had a happy and successful year of work.

Kettering—London Road Congregational Church Schoolrooms, Tennyson Road.

(Supervisor—Miss F. L. Caswell. Assistant Supervisor—Miss V. M. Shrive. Temporary Assistant Supervisor—Mrs. J. M. A. Green.)

At the beginning of the year 30 children attended the Centre, with a Supervisor and Assistant Supervisor. The numbers increased during the year and in June a second Assistant Supervisor was appointed. At the end of the year there were 34 children at the Centre.

Most of the children continued to come on public transport, with the staff escorting them to and from the buses. Thirteen children came on the Kingsley Avenue Special School bus from the Corby, Desborough and Rothwell areas. Additional special transport was provided to convey five new children from Thrapston, Islip, Lowick and Barton Seagrave.

The older girls at the Centre were supplied with a certain amount of stripping and assembly work from the Thurgar Bolle factory in Kettering. The work was done at the Centre and the girls earned small weekly sums from it.

The curriculum was the same as in previous years with the inclusion of Margaret Morris Movement. There are now junior, intermediate and the adult girl classes, and this is much

more satisfactory than the former two-class organisation. One afternoon each week, weather permitting, there is a walk to the park for games and activity.

Employment was found for three older girls. One of these found work at a toy factory in Kettering, one at a doll factory, while the third girl undertook part-time work in a café in Kettering, leaving the Centre to wash up for two hours daily.

A pleasant day at the sea was organised for children and parents by the Kettering branch of the National Society for Mentally Handicapped Children. An outing to Wicksteed Park was arranged by the staff in the summer for the children attending the Corby, Wellingborough, Kettering and Northampton Junior Training Centres.

In connection with World Mental Health Year, an Exhibition of work, including some done at the Kettering Centre, was arranged in December at Wellingborough. This gave members of the public some idea of what is done in the Centres and how they are run. The staff of the Centres were available to speak to all those who wished further information. There was a very good display of work from Corby, Northampton, Wellingborough and Kettering Junior Training Centres, as well as from Kettering Senior Training Centre. This Exhibition was arranged by the Kettering branch of the National Society for Mentally Handicapped Children and the Supervisors of the Training Centres concerned.

In December, a combined Christmas party and display of work was held at the Centre. The children performed a playlet, "Through the Seasons". The work completed by the children during the year was on display and was bought by the parents. There was a Christmas tea with a large cake provided by two friends of the Centre. After tea Father Christmas had a present for each of the children, the presents being provided by the Kettering branch of the National Society for Mentally Handicapped Children.

Kettering Adult Training Centre—London Road Congregational Church Buildings—Tennyson Road.

(Supervisor—Mr. W. Lewis. Assistant Supervisor—Mr. D. A. Beale, from June, 1960.)

The number of pupils attending the Centre at the end of the year was 15 as compared with 12 in 1959.

The year was one of steady progress and improvement and there was ample work to keep the trainees fully occupied. Several new activities were started, including gardening and a hobbies afternoon.

The former takes place at the Stockburn Memorial Home, which was taken over in October, and is under the guidance of the Assistant Supervisor. The hobbies afternoon became possible when a room was obtained at the Stockburn Home. The boys helped to redecorate the room, and among their present hobbies are stamp collecting, scrap books, model making, a model railway layout, as well as the playing of an extensive collection of Rock 'n roll records.

Woodwork has proved the mainstay of the Centre and there has always been a superfluity of work to be done. A new Mortising machine and a Jig Saw were obtained and these have proved a great help in the training of the boys, as well as disproving yet again the commonly-held belief that the severely subnormal cannot be trained to handle power machinery effectively and safely.

There has been a substantial increase in the printing work of the Centre, and a second press had to be installed. The two machines now provide work for three trainees.

It has been possible to increase the trainees' pocket money and, from the sale of goods, various recreational and other amenities have been provided. For example, the trainees had a most successful visit to London Airport while, at Christmas, a "works dinner" took place at a local hotel.

The Centre has received a large number of visitors during the year. In December the Kettering and District Society for Mentally Handicapped Children organised an Exhibition at Wellingborough. Much interest was displayed in the finished products from the Centre and many orders were placed by visitors to the Exhibition.

DOMICILIARY OCCUPATIONAL THERAPY

During this year the Occupational Therapist and the County Welfare Department's Craft Instructor made a total number of 1,042 visits to approximately 100 Health Department patients. The average number on the register for any one quarter was 50 and, throughout the year, there was a gradual turnover of cases.

Since March, second and final year students from St. Andrew's School of Occupational Therapy have accompanied the Occupational Therapist on her visits. These pupils have been able to assist her and, at the same time, have gained insight into domiciliary work.

(a) *Mental subnormality.*

Home visiting of severely subnormal patients has been somewhat reduced in consequence of the expanding facilities provided by the Training Centres. However, the small group started at Long Buckby in 1959 still continued to function and now comprises two girls and one boy. A sewing machine is in use and the girls are learning to make clothes for themselves in addition to instrument bags for district nurses.

(b) *Mental illness.*

Because of the increasing amount of after-care undertaken as a result of the Mental Health Act, the number of patients receiving occupational therapy this year has again increased. Those referred were mainly long-term cases, including patients suffering from schizophrenia, involutional and reactive depression, and all types of neurosis.

For example, a man aged 54 years was suffering from chronic neurosis dating back for 16 years. Having originally contracted tuberculosis, he had to undergo a lengthy period of treatment, with consequent inactivity of mind and body. These played their part in determining the onset of mental illness. He eventually returned home from hospital with a dual disability, unable to resume his job and having no compensatory activity to which he could apply himself. For the past two years the Occupational Therapist has been visiting this man at fortnightly intervals, encouraging him in various activities, including model assembly (whereby he has earned a small wage) and supplying materials for leatherwork, at which he is expert. In large measure, as a result of this, there has been a gradual improvement over the period in both his mental and physical conditions, and he has now more confidence to face life.

(c) *Other patients.*

These include patients who are suffering from illness other than mental disorder and are not permanently handicapped. Most have been suffering from such disabilities as chest conditions, hemiplegia, cardiac disorders or rheumatoid arthritis. The aim is to provide active rehabilitation by means of occupational therapy.

An example of such work is a woman of 47 who was visited whilst recovering at home from a severe attack of tuberculous meningitis. This lady, who had previously worked as a shop assistant, was suffering from some residual loss of balance which prevented her from going back to her former employment. She was nevertheless eager to return to some job at the earliest possible opportunity and was interested in secretarial work. A typewriter was supplied and, with a small amount of tuition, she soon began to acquire skill. Later she became stronger and arrangements were made for her to attend for part-time lessons at a Technical College, the lessons being gradually increased as her recovery progressed. Recently she has passed the final examination and is now back in full-time employment.

Domiciliary occupational therapy thus has an important role to play in rehabilitating patients of all kinds, from both the physical and mental points of view. Where, as in the example which has just been quoted, a return to full-time employment is achieved, there is also a clear economic advantage both to the individual and to the country as a whole.

CAUSES OF DEATH	Brackley		Burton		Corby		Daventry		Desboro'		Higham		Irthling-		Kettering		Oundle		Raunds		Rothwell		Rushden		Welling-		Aggregate of U.D.S.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.			
ALL CAUSES	13	12	27	29	128	58	37	39	29	32	23	23	32	29	221	252	19	23	35	21	20	30	102	89	200	216	886	853	
1 Tuberculosis, respiratory .....	...	...	...	...	2	...	1	...	...	...	...	...	...	1	3	...	...	...	...	...	...	1	...	3	...	9	1
2 Tuberculosis, other .....	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
3 Syphilitic disease.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2
4 Diphtheria .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 Whooping Cough.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6 Meningococcal infections .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 Acute Poliomyelitis .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8 Measles .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9 Other infective and parasitic diseases .....	...	...	...	...	1	1	...	1	...	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...	2	5	
10 Malignant neoplasm, stomach	1	1	...	1	4	...	...	1	...	...	...	...	2	...	8	1	2	...	...	...	...	...	...	...	3	25	
11 Malignant neoplasm, lung, bronchus .....	...	...	5	...	8	...	4	...	2	...	1	...	...	...	5	...	...	...	...	...	...	...	...	...	13	48	
12 Malignant neoplasm, breast .....	...	...	...	3	...	...	...	...	...	...	...	...	...	1	...	7	...	...	...	...	...	...	...	...	...	3	...
13 Malignant neoplasm, uterus .....	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	7	...	...	...	...	...	...	...	...	...	8	...
14 Other malignant & lymphatic neoplasms	2	3	...	3	6	7	3	4	...	5	3	1	...	...	23	25	1	2	...	...	...	...	...	...	...	...	16
15 Leukaemia, aleukaemia .....	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	73
16 Diabetes .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
17 Vascular lesions of nervous system	2	1	5	3	8	5	6	9	...	3	7	1	2	...	24	38	...	...	...	...	...	...	...	...	...	...	4
18 Coronary disease, angina	3	3	5	3	20	6	4	3	4	4	6	4	4	3	41	31	3	5	4	3	5	1	23	7	40	94			
19 Hypertension with heart disease.....	...	1	...	2	2	1	...	...	1	1	1	...	...	1	8	8	...	...	...	...	...	...	...	...	...	26	
20 Other heart disease	2	1	2	6	8	8	4	7	3	12	9	...	5	7	37	53	1	6	...	...	...	...	...	...	...	44	
21 Other circulatory disease	1	...	1	1	4	...	1	1	...	...	1	...	2	2	9	10	...	1	1	...	...	...	...	...	...	13	
22 Influenza .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
23 Pneumonia .....	...	...	...	2	6	4	4	4	1	...	2	2	...	...	9	8	...	...	...	...	...	...	...	...	...	...	12
24 Bronchitis.....	1	1	2	1	11	4	3	1	1	...	...	...	2	...	16	11	...	...	...	...	...	...	...	...	...	...	4
25 Other diseases of respiratory system	1	...	1	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
26 Ulcer of stomach and duodenum.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
27 Gastritis, enteritis and diarrhoea.....	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6
28 Nephritis and nephrosis .....	...	...	1	1	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
29 Hyperplasia of prostate .....	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7
30 Pregnancy, childbirth, abortion .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
31 Congenital malformations .....	...	...	...	...	11	1	...	...	1	...	...	...	...	...	3	1	...	...	...	...	...	...	...	...	...	...	6
32 Other defined and ill-defined diseases .....	...	1	3	3	12	11	4	2	5	1	1	2	1	1	13	25	2	1	...	...	...	...	...	...	...	...	19
33 Motor vehicle accidents .....	...	...	...	1	6	1	...	1	1	...	...	...	...	...	5	1	...	...	...	...	...	...	...	...	...	...	2
34 All other accidents .....	...	...	2	...	4	2	1	1	1	...	...	...	...	1	4	7	...	...	...	...	...	...	...	...	...	...	8
35 Suicide .....	...	...	...	...	...	2	1	1	...	...	...	...	...	...	3	4	...	...	...	...	...	...	...	...	...	...	11
36 Homicide and operations of war .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Live Births { Total ...	26	23	28	39	517	449	58	80	28	23	27	30	27	38	332	282	18	19	21	35	45	30	129	140	267	278	1523	1466	
{ Legitimate ...	25	22	26	38	494	431	56	79	28	21	27	28	25	37	317	268	18	18	21	35	43	30	125	138	250	264	1455	1409	
{ Illegitimate ...	1	1	2	1	23	18	2	1	...	2	...	2	2	1	15	14	...	1	68	57
Still Births { Total ...	1	1	3	10	1	1	...	1	1	1	5	2	3	...	1	9	5	23	22	
{ Legitimate ...	1	1	3	10	1	1	...	1	1	...	5	2	3	...	1	8	5	22	22	
{ Illegitimate	1	...
Deaths of Infants { Total	1	1	20	11	2	2	2	1	...	1	2	2	4	8	2	...	2	6	4	42	33	
under 1 year { Legitimate	1	1	20	10	2	2	2	1	...	1	2	2	3	6	2	...	2	6	4	41	29	
of age { Illegitimate	1	1	2	1	4
Deaths of Infants { Total	1	1	12	6	1	1	2	...	3	4	2	...	2	4	3	30	18	
under 4 weeks { Legitimate	1	1	12	5	1	1	2	...	2	3	2	...	2	4	3	29	15	
of age { Illegitimate	1	1	1	1	3
Deaths of Infants { Total	1	1	10	6	1	1	2	...	1	3	2	...	2	3	3	25	17	
under 1 week { Legitimate	1	1	10	5	1	1	2	...	1	2	2	...	2	3	3	25	14	
of age { Illegitimate	1	3
Estimated mid-year Home Population	3,190	4,370	34,700	5,600	4,860	3,710	5,210	38,030	3,100	4,670	4,660	17,140	30,020	159,260															

CAUSES OF DEATH IN ADMINISTRATIVE AREAS—RURAL DISTRICTS. TABLE I. (b)

CAUSES OF DEATH.	Brackley R.D.		Brixworth R.D.		Daventry R.D.		Kettering R.D.		Northampton R.D.		Oundle and Thrapston R.D.		Towcester R.D.		Wellingborough R.D.		Aggregate of R.Ds.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ALL CAUSES	56	56	99	130	103	85	60	46	154	160	107	87	73	69	79	82	731	715
1 Tuberculosis, respiratory .....	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	1	1	2
2 Tuberculosis, other .....	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1
3 Syphilitic disease.....	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...
4 Diphtheria .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5 Whooping Cough.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6 Meningococcal infections .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7 Acute Poliomyelitis .....	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...
8 Measles .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9 Other infective and parasitic diseases .....	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	1	2
10 Malignant neoplasm, stomach .....	...	...	5	1	4	3	2	...	1	3	7	...	2	1	1	1	22	9
11 Malignant neoplasm, lung, bronchus	4	1	9	2	8	1	2	...	15	...	6	1	6	2	2	...	52	7
12 Malignant neoplasm, breast .....	...	1	...	4	...	1	...	1	...	8	...	1	...	2	...	1	...	19
13 Malignant neoplasm, uterus .....	...	...	...	2	...	1	...	3	...	5	...	...	...	1	...	1	...	13
14 Other malignant & lymphatic neoplasms	4	5	8	10	9	5	6	7	10	7	7	5	9	7	6	6	59	52
15 Leukaemia, aleukaemia .....	...	1	...	...	2	2	...	1	...	1	1	2	...	...	...	...	3	7
16 Diabetes .....	...	...	...	1	1	2	...	...	...	...	1	3	1	...	...	1	3	7
17 Vascular lesions of nervous system	8	14	3	31	11	10	3	4	13	27	10	16	7	9	9	9	64	120
18 Coronary disease, angina	8	9	26	15	21	12	18	7	33	19	22	13	20	13	15	18	163	106
19 Hypertension with heart disease...	2	2	2	3	2	3	...	1	4	5	...	...	1	1	1	1	12	16
20 Other heart disease	9	8	13	28	15	20	13	5	23	29	14	20	12	12	14	13	113	135
21 Other circulatory disease	3	4	2	8	5	2	3	5	12	12	4	5	3	4	2	8	34	48
22 Influenza	1	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	3	...
23 Pneumonia	5	...	6	2	1	7	4	2	6	11	4	2	1	1	2	6	29	31
24 Bronchitis.....	2	1	3	3	2	1	3	...	7	5	6	3	6	4	5	2	34	19
25 Other diseases of respiratory system .....	...	...	4	...	...	...	1	1	2	...	1	1	...	1	1	1	9	4
26 Ulcer of stomach and duodenum...	...	1	...	2	2	...	...	...	...	2	2	...	...	...	...	1	4	6
27 Gastritis, enteritis and diarrhoea...	...	...	...	2	...	...	...	...	1	2	...	1	...	1	...	...	1	6
28 Nephritis and nephrosis	1	1	2	2	1	...	1	1	...	1	1	...	...	...	2	1	8	6
29 Hyperplasia of prostate	1	...	3	...	2	...	1	...	2	...	3	...	1	...	...	...	13	...
30 Pregnancy, childbirth, abortion .....	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
31 Congenital malformations .....	...	1	3	...	...	1	1	2	1	1	1	1	...	1	1	1	7	8
32 Other defined and ill-defined diseases	4	6	6	10	8	10	1	2	16	12	9	7	4	5	10	6	58	58
33 Motor vehicle accidents	1	...	1	...	1	1	1	...	2	2	2	...	...	...	4	1	12	4
34 All other accidents	2	1	1	3	4	1	...	3	3	8	5	5	...	1	1	2	16	24
35 Suicide .....	...	...	2	...	2	1	...	...	1	...	...	1	...	2	2	...	7	4
36 Homicide and operations of war ...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Live Births { Total ...	104	102	159	151	135	116	78	68	255	221	159	142	135	149	117	103	1142	1052
Live Births { Legitimate ...	98	96	154	145	127	111	76	67	249	217	152	134	129	141	113	97	1098	1008
Live Births { Illegitimate ...	6	6	5	6	8	5	2	1	6	4	7	8	6	8	4	6	44	44
Still Births { Total ...	...	2	4	...	2	...	1	...	9	4	8	2	2	3	1	3	27	14
Still Births { Legitimate ...	...	2	3	...	2	...	1	...	9	4	8	2	2	3	1	3	26	14
Still Births { Illegitimate ...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Deaths of Infants under 1 year of age { Total ...	3	3	2	...	4	1	...	3	7	5	3	2	1	1	4	3	24	18
Deaths of Infants under 1 year of age { Legitimate ...	3	3	2	...	4	1	...	3	7	5	3	2	1	1	4	3	24	18
Deaths of Infants under 1 year of age { Illegitimate ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths of Infants under 4 weeks of age { Total ...	2	3	1	...	4	1	...	3	5	3	2	2	1	...	3	1	18	13
Deaths of Infants under 4 weeks of age { Legitimate ...	2	3	1	...	4	1	...	3	5	3	2	2	1	...	3	1	18	13
Deaths of Infants under 4 weeks of age { Illegitimate ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths of Infants under 1 week of age { Total ...	2	3	...	...	3	1	...	3	5	1	2	1	1	...	3	1	16	10
Deaths of Infants under 1 week of age { Legitimate ...	2	3	...	...	3	1	...	3	5	1	2	1	1	...	3	1	16	10
Deaths of Infants under 1 week of age { Illegitimate ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Estimated mid-year Home Population	11,280		19,470		16,190		12,020		26,560		18,430		14,660		14,820		133,430	
Comparability Factors Births ...	1.04		1.04		1.08		1.11		1.01		1.08		1.08		1.08		1.06	
Comparability Factors Deaths ...	0.94		0.80		0.93		1.02		0.83		0.98		0.91		0.89		0.92	

TABLE II.
CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON.

CAUSES OF DEATH	Sex	AGGREGATE OF URBAN DISTRICTS										AGGREGATE OF RURAL DISTRICTS									
		All Ages	0—	1—	5—	15—	25—	45—	65—	75—		All Ages	0—	1—	5—	15—	25—	45—	65—	75—	
1 Tuberculosis, respiratory	M. F.	9 1	...	...	...	...	...	3	3	3		1	...	...	...	...	...	1	...	...
2 Tuberculosis, other	M. F.	2 ...	1 ...	...	...	...	...	...	1	...		...	...	...	...	...	1	...	...	...
3 Syphilitic disease.....	M. F.	1 2	...	...	...	...	...	...	1	1		1	...	...	...	...	...	1	...	...
4 Diphtheria	M. F.	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
5 Whooping Cough.....	M. F.	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
6 Meningococcal infections	M. F.	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
7 Acute Poliomyelitis	M. F.	...	...	...	...	...	...	...	...	...		1	...	...	...	1	...	...	...	...
8 Measles	M. F.	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
9 Other infective and parasitic diseases	M. F.	5 5	1 4	...	...	...	1	2	...	1		1	...	1	...	...	...	...	...	...
10 Malignant neoplasm, stomach ...	M. F.	25 17	...	...	...	...	1	8	13	3		22	...	...	...	...	...	10	7	5	
11 Malignant neoplasm, lung, bronchus	M. F.	48 3	...	...	...	...	2	30	11	5		52	...	...	...	...	3	29	15	5	
12 Malignant neoplasm, breast	M. F.	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
13 Malignant neoplasm, uterus	M. F.	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...
14 Other malignant and lymphatic neoplasms	M. F.	73 83	...	...	1	...	2	19	28	23		59	...	...	...	1	4	15	15	24	
15 Leukaemia, aleukaemia	M. F.	4 3	...	1	...	...	...	3	...	...		3	...	...	...	...	...	1	1	1	
16 Diabetes	M. F.	7 3	...	...	...	...	...	2	3	2		3	...	...	...	...	...	...	1	2	
17 Vascular lesions of nervous system.....	M. F.	94 147	...	...	...	...	...	15	37	42		64	...	...	...	...	...	12	19	33	
18 Coronary disease, angina	M. F.	164 98	...	...	...	...	3	59	46	56		163	...	...	...	...	4	43	58	58	
19 Hypertension, with heart disease	M.	22	...	...	...	...	...	5	8	9		12	...	...	...	1	...	4	4	3	

TABLE II. (continued).
CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE COUNTY OF NORTHAMPTON.

CAUSES OF DEATH	Sex	AGGREGATE OF URBAN DISTRICTS										AGGREGATE OF RURAL DISTRICTS									
		All ages	0—	1—	5—	15—	25—	45—	65—	75—		All Ages	0—	1—	5—	15—	25—	45—	65—	75—	
20 Other heart disease	M. F.	116 164	... ...	... 1	... 1	... ...	3 4	10 15	13 17	90 126		113 135	... ...	... ...	1 ...	... ...	... ...	13 9	21 24	78 102	
21 Other circulatory disease	M. F.	29 36	... ...	... ...	... ...	... 1	1 ...	6 3	7 9	15 23		34 48	... ...	... ...	... ...	... ...	... ...	5 6	8 12	21 30	
22 Influenza	M. F.	4 7	... ...	... ...	... ...	... ...	... ...	3 ...	... 3	1 4		3 ...	... ...	... ...	... ...	... ...	... ...	... ...	1 ...	2 ...	
23 Pneumonia	M. F.	43 36	5 3	1 1	1 ...	... ...	... ...	8 4	7 5	21 23		29 31	2 1	1 ...	... ...	... ...	1 ...	1 5	10 8	14 17	
24 Bronchitis.....	M. F.	71 28	1 ...	... ...	... ...	... ...	... ...	22 4	24 10	24 14		34 19	... ...	... ...	... ...	... ...	... ...	14 3	9 7	11 9	
25 Other diseases of respiratory system.....	M. F.	13 9	... ...	... ...	... ...	... ...	... 2	9 1	2 2	2 4		9 4	1 ...	... ...	1 ...	... ...	... 1	1 ...	2 ...	4 2	
26 Ulcer of stomach and duodenum	M. F.	6 6	... ...	... ...	... ...	... ...	... ...	... 2	2 1	4 3		4 6	... ...	... ...	... ...	... ...	... 1	... 1	3 ...	... 4	
27 Gastritis, enteritis and diarrhoea	M. F.	7 3	1 1	... ...	... ...	... ...	... ...	... ...	2 ...	2 2		1 6	1 1	... ...	... ...	... ...	... ...	... ...	... 3	... 2	
28 Nephritis and nephrosis	M. F.	5 4	... ...	... ...	1 ...	... ...	1 1	2 1	... 2	1 ...		8 6	... ...	... ...	... ...	1 ...	1 1	1 1	2 1	3 3	
29 Hyperplasia of prostate	M. F.	9 ...	... ...	... ...	... ...	... ...	... ...	1 ...	3 ...	5 ...		13 ...	... ...	... ...	... ...	... ...	... ...	1 ...	5 ...	7 ...	
30 Pregnancy, childbirth, abortion	M. F.	... 1	... ...	... ...	... ...	... 1	... ...	... ...	... ...	... ...		... 1	... ...	... ...	... ...	... 1	... ...	... ...	... ...	... ...
31 Congenital Malformations	M. F.	18 4	14 3	1 ...	2 ...	1 1	... ...	... ...	... ...	... ...		7 8	3 7	... ...	... ...	... ...	... ...	3 1	1 ...	... ...
32 Other defined and ill-defined diseases	M. F.	70 79	19 20	... ...	... ...	1 ...	4 3	12 20	14 9	20 27		58 58	17 8	1 2	1 ...	... ...	4 4	5 10	13 14	17 20	
33 Motor vehicle accidents.....	M. F.	14 9	... ...	... ...	3 ...	4 ...	4 2	1 2	1 1	1 4		12 4	... ...	... ...	... ...	2 ...	1 ...	7 2	1 1	1 1	
34 All other accidents	M. F.	16 22	... 1	... 1	... ...	3 ...	... 1	7 3	... 5	6 11		16 24	... ...	1 1	4 ...	1 ...	3 ...	3 2	1 4	3 17	
35 Suicide	M. F.	11 8	... ...	... ...	... ...	1 ...	4 2	4 3	2 2	... 1		7 4	... ...	... ...	... ...	... ...	1 1	2 2	2 ...	2 1	
36 Homicide and operations of war	M. F.	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...		1 ...	... ...	... ...	1 ...	... ...	... ...	... ...	... ...	... ...
ALL CAUSES	M. F.	886 853	42 33	3 3	8 1	10 3	26 29	233 150	228 190	336 444		731 715	24 18	4 4	8 ...	7 2	22 21	173 123	199 169	294 378	

TABLE II(a)

CAUSES OF DEATHS OF CHILDREN UNDER ONE YEAR—1960

Cause of Death	Age in Weeks					Total
	—1	—2	—3	—4	4-52	
Prematurity	36	—	—	—	—	36
Congenital Malformations	14	4	3	—	14	35
Respiratory Diseases	1	—	—	—	9	10
Asphyxia and Atelectasis	1	—	—	—	1	2
Infections (other than lung and gut)	1	1	—	1	7	10
Enteritis and Diarrhoea	—	—	—	1	4	5
Accidents	—	—	—	—	—	—
Birth Injury	9	—	—	—	—	9
Haemolytic Disease	1	—	—	—	—	1
Other Causes	2	—	1	—	1	4
TOTALS	65	5	4	2	36	112

- Notes : 1. These figures have been prepared from an analysis of death returns received from the local Registrars, and differ slightly from those quoted by the Registrar General. According to the latter there were 68 children who died in the first week of life, 11 who died in the period eight days to four weeks, and 38 in the period 29 days to one year. It must be emphasised that this table is based only on the information contained in death certificates and that practitioners vary in the way in which they complete these. For example, the death of a premature baby who died from asphyxia or from cerebral haemorrhage might be ascribed to either of the latter without the fact that it was premature being noted. If, however, prematurity was mentioned on the certificate, the death would be classified under this heading.
2. The child of six months who died from asphyxia did so as the result of inhalation of vomit.
3. Infections include toxæmia, bacteraemia, meningitis and hepatitis.
4. Birth injury includes five cases of cerebral haemorrhage.

TABLE II(b)

STILLBIRTHS, NEONATAL DEATHS, PERINATAL DEATHS AND POSTNEONATAL DEATHS

Year	Stillbirths		Neonatal Deaths (up to 28 days)		Perinatal Deaths (Stillbirths & Early Neonatal Deaths)		Postneonatal Deaths (29 days to one year)		Infant Deaths (Neonatal and Postneonatal Deaths)	
	No.	Rate (per 1,000 live & stillbirths)	No.	Rate (per 1,000 live births)	No.	Rate (per 1,000 live & stillbirths)	No.	Rate (per 1,000 live births)	No.	Rate (per 1,000 live births)
1950	83	20.35	78	19.52	161	39.48	40	10.01	118	29.53
1951	99	24.17	61	15.26	160	39.06	40	10.00	101	25.26
1952	84	20.54	78	19.47	162	39.60	22	5.49	100	24.96
1953	92	21.18	75	17.64	167	38.46	30	7.06	105	24.70
1954	98	22.29	70	16.28	168	38.02	31	7.21	101	23.50
1955	103	24.03	52	12.43	155	36.16	35	8.36	87	20.79
1956	85	18.25	66	14.43	151	32.43	24	5.25	90	19.68
1957	91	18.80	75	15.79	166	34.30	32	6.73	107	22.53
1958	109	22.16	63	13.10	172	34.97	32	6.65	95	19.75
1959	94	19.20	64	13.33	151	30.85	33	6.87	97	20.20
1960	86	16.32	79	15.24	154	29.22	38	7.33	117	22.57

CASES OF INFECTIOUS DISEASES, 1960.
(Final numbers after correction.)

TABLE III.

DISEASES	URBAN DISTRICTS												RURAL DISTRICTS									Totals for Administrative County		
	Brackley (Borough)	Daventry (Borough)	Higham Ferrers (Boro')	Kettering (Borough)	Burton Latimer	Corby	Desborough	Irthlingborough	Oundle	Raunds	Rothwell	Rushden	Wellingborough	Totals for Combined Urban Districts	Brackley	Brixworth	Daventry	Kettering	Northampton	Oundle and Thrapston	Towcester		Wellingborough	Totals for Combined Rural Districts
Scarlet Fever ...	—	3	—	27	6	5	9	11	—	6	4	29	23	123	3	20	17	6	26	16	6	17	111	234
Whooping Cough...	—	—	—	31	10	16	4	—	—	7	3	3	17	91	5	3	8	1	34	1	22	2	76	167
Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paralytic ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Non-Paralytic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles ...	8	97	55	352	31	60	127	—	2	—	45	63	171	1011	36	13	53	54	5	163	15	72	411	1422
Diphtheria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Dysentery (Bacillary)	—	12	—	4	2	203	—	—	17	—	2	1	1	242	1	13	—	10	17	13	10	—	64	306
Meningococcal Infection	—	—	—	2	—	1	—	—	—	—	—	—	1	4	—	1	—	—	—	—	—	—	1	5
Pneumonia ...	—	3	5	21	9	16	—	1	—	2	1	10	47	115	1	4	3	7	20	6	15	6	62	177
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Encephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Infective ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Post Infectious	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric or Typhoid Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	2	2
Paratyphoid Fever	—	—	—	6	—	—	—	—	—	—	—	—	—	6	—	—	—	—	—	—	—	—	—	6
Erysipelas...	—	—	2	4	—	—	—	—	—	—	—	—	6	12	—	3	—	2	5	1	1	—	12	24
Food Poisoning	—	—	—	10	—	3	1	—	1	—	—	1	2	18	—	3	1	3	3	3	2	3	18	36
Puerperal Pyrexia	—	—	—	13	—	1	—	—	—	1	—	—	10	25	—	1	—	—	—	—	—	—	1	26
Ophthalmia Neonatorum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis of the Res-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
piratory System ...	1	3	1	13	—	18	1	2	—	1	3	8	18	69	2	3	4	1	4	4	3	5	26	95
Other forms of Tuberculosis	—	1	1	5	—	1	2	—	—	1	1	4	2	18	—	—	—	1	2	1	—	2	6	24
Malaria ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals ...	9	119	64	488	58	324	144	14	20	18	59	119	298	1734	48	64	86	85	118	208	74	107	790	2524

TABLE IV.

SEX AND AGE DISTRIBUTION OF NOTIFIABLE DISEASES, 1960.

Numbers of Cases of Infectious Diseases originally notified during 1960, and of the Final numbers according to Sex and Age after correction subsequently made either by the Notifying Practitioner or the Medical Superintendent of the Infectious Diseases Hospital

	Scarlet Fever		Whooping Cough		Acute Poliomyelitis				Measles (excluding Rubella)		Diphtheria		Dysentery		Meningococcal Infection	
					Para.		Non-Para.									
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
No. originally notified																
Total (all ages) ...	118	116	72	95	1	1	1	—	743	679	—	—	149	156	2	3
Final numbers after correction																
Under 1 year ...	—	—	13	8	—	—	—	—	26	20	—	—	2	8	1	1
Age 1 year ...	1	1	6	15	—	—	—	—	65	53	—	—	12	6	1	—
Age 2 years ...	5	1	7	5	—	—	—	—	88	81	—	—	15	11	—	—
Age 3 years ...	14	9	7	12	—	—	—	—	85	79	—	—	10	8	—	—
Age 4 years ...	17	11	6	7	—	—	—	—	113	111	—	—	10	5	—	—
5-9 years ...	67	70	25	39	—	—	—	—	335	294	—	—	30	38	—	1
10-14 years ...	10	21	7	5	—	—	—	—	18	30	—	—	22	17	—	—
15-24 years ...	3	2	1	2	—	—	—	—	5	4	—	—	8	18	—	1
25 and over ...	1	—	—	1	—	—	—	—	3	2	—	—	39	46	—	—
Age unknown ...	—	1	—	1	—	—	—	—	5	5	—	—	1	—	—	—
Total (all ages) ...	118	116	72	95	—	—	—	—	743	679	—	—	149	157	2	3

	Acute Pneumonia		Smallpox		Acute Encephalitis				Enteric or Typhoid Fever		Paratyphoid Fever		Erysipelas		Food Poisoning	
					Infec.		Post-Inf.									
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
No. originally notified																
Total (all ages) ...	96	81	—	—	—	—	—	—	2	—	2	4	13	11	20	18
Final numbers after correction																
Under 5 years ...	12	10	—	—	—	—	—	—	—	—	1	—	—	—	5	3
5-14 years ...	13	13	—	—	—	—	—	—	—	—	—	2	—	—	4	2
15-44 years ...	23	13	—	—	—	—	—	—	1	—	—	2	4	1	8	6
45-64 years ...	37	28	—	—	—	—	—	—	—	—	1	—	7	6	2	3
65 and over ...	10	17	—	—	—	—	—	—	1	—	—	—	2	4	—	3
Age unknown ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total (all ages) ...	96	81	—	—	—	—	—	—	2	—	2	4	13	11	19	18

Other notifiable diseases			
Original		Final	
M.	F.	M.	F.
Puerperal Pyrexia			
—	26	—	26
Ophthalmia Neonatorum			
—	—	—	—

NORTHAMPTONSHIRE.

TUBERCULOSIS DEATHS AND MORTALITY RATES, 1900-1960.

Year	Estimated Populations.	Tuberculosis of Respira- tory System.	Death Rate per 1000 of Population.	Other forms of Tuberculosis.	Death Rate per 1000 of Population.	All forms of Tuberculosis.	Death Rate per 1000 of Population.
1900	220,678	205	.93	46	.20	251	1.13
1901	207,719	162	.78	47	.22	209	1.00
1902	209,984	199	.94	63	.30	262	1.24
1903	212,610	182	.85	66	.31	248	1.16
1904	213,874	204	.95	82	.38	286	1.33
1905	214,909	165	.77	85	.39	250	1.16
1906	216,319	186	.86	63	.29	249	1.15
1907	216,935	196	.90	61	.28	257	1.18
1908	217,765	207	.95	68	.31	275	1.26
1909	219,149	185	.84	77	.35	262	1.19
1910	220,897	190	.86	66	.29	256	1.15
1911	213,796	204	.95	77	.36	281	1.31
1912	215,091	197	.92	57	.26	254	1.18
1913	215,579	192	.89	58	.26	250	1.15
1914	216,569	178	.82	50	.23	228	1.05
1915	211,286	202	.95	59	.28	261	1.23
1916	202,552	242	1.19	60	.30	302	1.49
1917	190,215	229	1.20	55	.29	284	1.49
1918	192,564	230	1.19	59	.31	289	1.50
1919	207,508	183	.88	52	.25	235	1.13
1920	215,777	160	.74	44	.20	204	0.94
1921	212,270	172	.81	46	.21	218	1.02
1922	213,340	162	.76	27	.12	189	0.88
1923	214,331	159	.74	38	.17	197	0.91
1924	215,200	169	.78	27	.13	196	0.91
1925	215,300	174	.80	35	.17	209	0.97
1926	214,200	136	.63	28	.13	164	0.76
1927	215,000	162	.75	30	.14	192	0.89
1928	215,100	140	.65	32	.14	172	0.79
1929	216,500	159	.73	20	.09	179	0.82
1930	217,550	150	.69	31	.14	181	0.83
1931	218,300	130	.60	25	.11	155	0.71
1932	213,900	115	.53	24	.11	139	0.64
1933	214,300	116	.54	20	.09	136	0.63
1934	214,550	114	.53	34	.15	148	0.68
1935	216,200	119	.55	27	.12	146	0.67
1936	217,600	99	.45	18	.08	117	0.53
1937	220,400	94	.42	28	.13	122	0.55
1938	221,400	104	.47	24	.10	128	0.57
1939	228,300	96	.42	16	.07	112	0.49
1940	241,200	113	.47	28	.11	141	0.58
1941	259,820	106	.41	24	.09	130	0.50
1942	243,800	92	.38	28	.11	120	0.49
1943	235,000	101	.43	17	.07	118	0.50
1944	233,340	112	.48	33	.14	145	0.62
1945	228,640	111	.48	22	.10	133	0.58
1946	236,340	87	.37	20	.08	107	0.45
1947	240,210	69	.29	18	.07	87	0.36
1948	247,820	87	.35	18	.07	105	0.42
1949	250,500	101	.40	8	.03	109	0.43
1950	254,210	65	.26	10	.04	75	0.30
1951	256,700	57	.22	9	.04	66	0.26
1952	258,500	55	.21	9	.03	64	0.25
1953	262,900	42	.16	5	.02	47	0.18
1954	265,200	25	.09	7	.03	32	0.12
1955	270,000	19	.07	5	.02	24	0.09
1956	274,200	20	.07	6	.02	26	0.09
1957	278,800	15	.05	2	.01	17	0.06
1958	283,600	21	.07	3	.01	24	0.08
1959	288,300	21	.07	—	—	21	0.07
1960	292,690	13	.04	3	.01	16	0.05

VITAL STATISTICS FOR 1960 AND PREVIOUS YEARS.

Year	Estimated Population mid-year	LIVE BIRTHS		DEATHS			
				Under 1 year		All Ages	
		No.	Rate per 1000 population	No.	Rate per 1000 live births	No.	Rate per 1000 population
1897	228,955	6761	29.50	906	134.00	3559	15.53
1898	234,902	6647	28.29	888	133.59	3374	14.30
1899	240,484	6632	27.59	870	131.10	3399	14.10
1900	§220,678	5621	25.47	617	109.76	3078	13.90
1901	207,719	5641	27.15	579	102.60	2758	13.27
1902	209,984	5453	25.96	535	98.11	2785	13.26
1903	212,610	5430	25.53	560	103.13	2838	13.34
1904	213,874	5265	24.61	614	116.61	2964	13.85
1905	215,909	5168	23.93	585	113.19	2812	13.02
1906	216,319	4997	23.10	514	102.86	2638	12.19
1907	216,935	4643	21.40	410	80.30	2656	12.24
1908	217,765	4755	21.83	454	95.47	2749	12.62
1909	219,149	4597	20.97	384	83.53	2790	12.73
1910	220,897	4430	20.05	356	80.36	2493	11.28
1911	213,796	4378	20.47	421	96.16	2692	12.59
1912	215,091	4281	19.90	342	79.88	2601	12.00
1913	215,579	4296	19.92	368	85.66	2525	11.71
1914	216,569	4146	19.14	305	73.56	2594	11.97
1915	211,286	4016	18.54	382	95.11	3012	14.25
1916	202,552	3822	17.34	254	66.00	2702	13.33
1917	190,215	3197	15.07	259	81.00	2665	14.01
1918	192,564	3096	14.34	210	67.00	2938	15.25
1919	†207,508 *216,162	3140	14.52	254	80.00	2873	13.84
1920	†215,777 *215,968	4913	22.74	293	59.00	2393	11.09
1921	‡212,769	4166	19.57	300	72.00	2514	11.84
1922	‡213,340 *213,840	3875	18.12	227	58.00	2507	11.75
1923	‡214,331 *214,820	3686	17.15	225	61.00	2475	11.54
1924	215,200	3494	16.23	185	52.00	2494	11.58
1925	215,300	3480	16.16	197	56.60	2525	11.72
1926	214,200	3393	15.84	177	52.16	2436	11.37
1927	215,000	3108	14.45	159	51.00	2539	11.80
1928	215,170	3175	14.75	154	48.00	2507	11.65
1929	216,500	3104	14.33	171	55.09	2649	12.23
1930	217,500	2991	13.74	126	42.12	2490	11.44
1931	218,300	2924	13.39	135	46.10	2472	11.32
1932	§213,900	2743	12.76	125	45.50	2463	11.45
1933	214,300	2665	12.43	112	42.02	2542	11.85
1934	214,550	2688	12.52	154	57.29	2706	12.61
1935	216,200	2881	13.32	146	50.67	2707	12.52
1936	217,600	3047	14.00	146	47.91	2660	12.22
1937	220,400	3104	14.08	136	43.81	2689	12.20
1938	221,400	3184	14.38	131	41.14	2552	11.52
1939	‡228,300 *222,100	3336	15.02	137	40.41	2758	12.08
1940	241,200	3363	13.94	170	48.39	3153	13.07
1941	259,820	3511	13.51	182	48.08	3103	11.94
1942	243,800	4062	16.66	140	34.46	2687	11.02
1943	235,000	4210	17.91	170	40.38	2890	12.29
1944	233,340	4684	20.07	178	38.00	2952	12.65
1945	228,640	4340	18.98	170	39.17	2822	12.34
1946	236,340	4531	19.17	167	36.86	2835	12.00
1947	240,210	4905	20.42	172	35.07	2986	12.43
1948	247,820	4326	17.46	137	31.67	2727	11.00
1949	250,500	4056	16.19	137	33.78	3023	12.07
1950	254,210	3995	15.71	118	29.53	3054	12.01
1951	256,700	3997	15.57	101	25.26	3112	12.13
1952	258,500	4006	15.50	100	24.96	2853	11.04
1953	262,900	4250	16.16	105	24.70	3027	11.51
1954	265,200	4298	16.20	101	23.50	2929	11.04
1955	270,000	4183	15.49	87	20.79	3074	11.38
1956	274,200	4571	16.67	90	19.68	3083	11.24
1957	278,800	4748	17.03	107	22.53	3059	10.97
1958	283,600	4809	16.95	95	19.75	3170	11.17
1959	288,300	4800	16.60	97	20.20	3106	10.77
1960	292,690	5183	17.70	117	22.57	3185	10.88

§ Extension of Borough of Northampton.

† Population for calculation of Death Rate.

* Population for calculation of Birth Rate.